

01.0 INTRODUCTION

The US 20 corridor was the first highway in Idaho to go through the corridor planning process. The process was developed by the Idaho Transportation Department (ITD) in an effort to plan and coordinate roadway and transportation improvements within the State. There were many reasons that US 20 was chosen as one of the first for development. The corridor has a multitude of uses and issues for the plan to address. For example, on the two-lane northern segment the highway is closed for approximately 15 minutes twice a year while sheep are being moved between their winter range and their summer range. In the urban parts of the corridor, however, commuting times and peak hour congestion are the most important issues.

US 20 carries heavy tourist volumes and many slower moving recreational vehicles, as it is the Idaho gateway to Yellowstone National Park. This route also provides access to one of eastern Idaho's major recreational areas in Island Park as well as some of the richest agricultural land in the state. The vehicle mix serving these different uses complicates the goal of ensuring safe and efficient travel for all corridor users, who are not limited to drivers of motorized vehicles. Users include pedestrians, bicyclists, and passengers riding public transportation.

The limits of this corridor analysis extend from the western edge of the Idaho Falls urban area to the bridge crossing Henry's Fork, north of Ashton, Idaho. Within these limits, there are approximately seven miles of urban area corridor, nine miles of rural two-lane corridor, and approximately 43 miles of four-lane divided highway. This corridor varies between urban and rural, but, in general, the farther north one travels on the corridor, the more rural it becomes.

Prior to 1976, US 20 was a two-lane highway facility. In that year, the 310-foot high Teton dam collapsed, washing out major portions of the Yellowstone Highway or old US 20. A determination was made to reconstruct US 20 as a four-lane divided highway facility. Funding restrictions precluded construction of a fully access-controlled facility. Thus many intersections were left at grade.

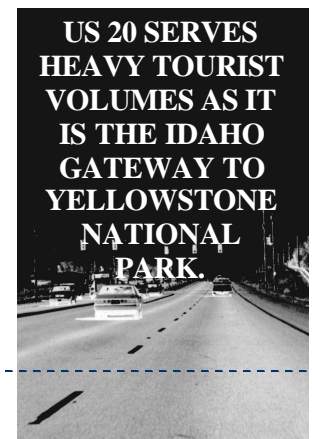


New Sweden School Road. Western Edge of Study Area

As traffic volumes increased, it became apparent that some intersections needed to be closed, while others were reconstructed as access-controlled interchanges.

This section of US 20 now includes 12 interchanges and 26 at-grade intersections.

Over time the safety problems associated with the at-grade intersections have overshadowed most other issues on the corridor. As land uses have changed and people have begun commuting longer distances to work, US 20 has absorbed a rapid growth in



average daily traffic (ADT). This growth in traffic combined with the multitude of uses has led to a very hazardous situation at many at-grade intersections, and has degraded the safety of the corridor.

Realizing that the safety issues on US 20 would never be fully resolved without a long-range, coordinated plan for making safety and facility improvements, ITD District 6 chose this corridor as their top priority for the development of a 20-year corridor plan. The process of plan development was collaborative and involved local citizens, stakeholders, and agencies to identify strategies, actions, and priorities for the management and improvement of the highway. In this way, recommended highway improvement options have gone through a public process, leading to a general consensus on needed improvements. Forging a consensus will facilitate projects through the development and construction process once ITD is ready to initiate the improvements.

1.1 The Corridor Planning Process— Why do we do it?

Early in 1998, the Idaho Transportation Board adopted a policy to develop corridor plans for State highways. Corridor planning has been introduced in response to many different factors including:

- To protect transportation investments,
- To work collaboratively with local communities,
- To ensure economical and effective solutions to transportation problems,
- To develop a balanced transportation system that includes all travel modes, and
- To respond to the needs and concerns of the traveling public.

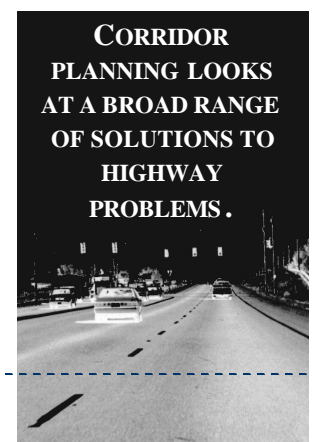
Corridor planning is a collaborative process, one that engages the Idaho Transportation

Department (ITD), local communities, and interested citizens in the development of a long-range (20-year) plan for a particular highway. The plan combines the technical elements of policy planning and traffic engineering with local concerns and needs. It is through input from local agencies (cities and counties), stakeholders (business leaders and elected officials), and concerned citizens that the State has developed the recommended maintenance and improvement strategy for the US 20 corridor.

Corridor planning looks at a broad range of solutions to highway problems, including management actions and service improvements as well as more traditional roadway improvement projects. Solutions can include:

- Controlling or eliminating corridor access points,
- Preserving environmentally or culturally sensitive areas,
- Changing local land use development patterns to protect roadway capacity,
- Constructing interchanges where at-grade level crossings exist,
- Providing or increasing public transportation services serving the area, and
- Adding bicycle and pedestrian improvements.

Producing a plan for the US 20 corridor will help the Idaho Transportation Department allocate financial resources by identifying highway needs in detail for the US 20 corridor. Through planning, ITD can develop and achieve a long-range vision for the maintenance and improvement of the US 20 corridor. The corridor “vision” is



then translated into management practices and project improvements that will serve the corridor for the next 20 years and beyond. As other corridor plans are developed, allocation of resources on a statewide basis can be made according to regional priorities.

Since corridor plans are developed collaboratively, they help to resolve major planning issues prior to project development, saving money and time in developing needed roadway or service improvements. By working together with local communities, ITD has considered a broad range of alternatives for making transportation improvements, leading to better and more cost-effective solutions to transportation problems on US 20.

1.2 Corridor Segmentation

Analyzing a corridor of 59 miles for US 20 is a complex and time consuming task, due to the varied and diverse issues. To better manage the analysis and discussion of the corridor as a whole, we have divided it into seven segments. Segments were chosen using logical political boundaries, landmark roadways, and topographical features. An effort was made to keep the segments roughly the same length, to avoid clustering issues in any one segment.

1.2.1 Segment 1—Idaho Falls to Ucon

Segment 1 extends from the western edge of the Idaho Falls metropolitan area to the southern edge of the city of Ucon. Segment 1, unlike the other segments, has been divided into two shorter segments to distinguish between the highly developed commercial portion of the corridor, which extends west from I-15, and the four-lane divided portion which extends from I-15 to the east.

1.2.2 Segment 2—Ucon to Rigby

Segment 2 extends from the southern edge of the Ucon city limits to the northern edge of the

Rigby city limits. This part of the corridor transitions from an urban setting to a more rural and small town environment. This portion of the corridor also crosses from Bonneville to Jefferson County.

1.2.3 Segment 3—Rigby to Rexburg

Segment 3 is the longest segment in this analysis. It extends from north of Rigby to the northern edge of the southernmost interchange in Rexburg. This segment crosses from Jefferson to Madison County. The look and feel of the corridor changes significantly from rural farm setting to urban freeway upon entering the city of Rexburg.

1.2.4 Segment 4—South Rexburg Interchange to State Highway 33

Segment 4 is one of the most highly developed segments on the corridor. It has two interchanges and two at-grade intersections that are both programmed for interchange construction within the next three years.

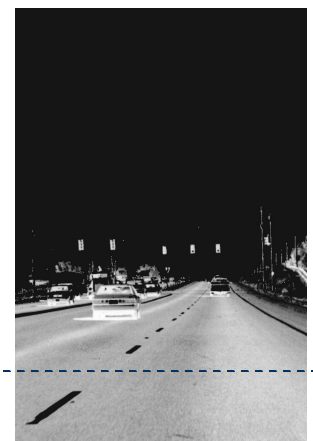
1.2.5 Segment 5—State Highway 33 to St. Anthony

Segment 5 extends from just north of the intersection with State Highway 33 to east of the interchange in St. Anthony. This segment traverses the border between Madison and Fremont County, with traffic volumes dropping significantly from those on the southern end of the corridor.

1.2.6 Segment 6—St. Anthony to Chester

This segment is the most rural segment of the four-lane corridor. Segment 6 extends from north of the St.

Anthony interchange to the end of the four-lane section, where the highway narrows to two lanes at Chester. This segment has the lowest vehicle counts

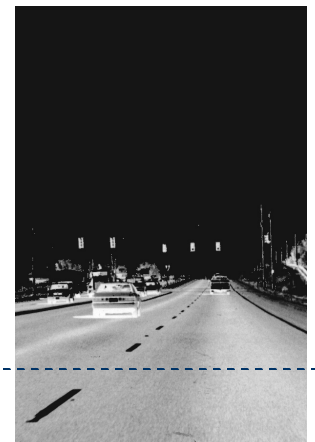


of any of the four-lane segments.

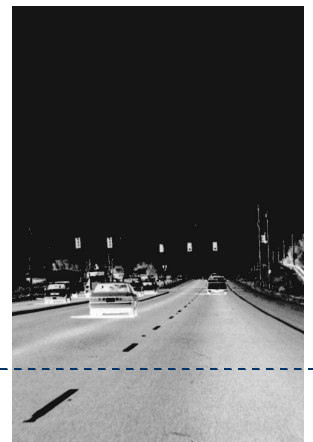
1.2.7 Segment 7—Chester to the Ashton Hill Bridge

Segment 7 is the only two-lane segment in the analysis. This segment has the lowest vehicle counts in the study area. There are also several at-grade crossings of the corridor in this segment; however, these have a much better safety record than the crossings on the four-lane section.

The following map shows the corridor, its segments, and the study area boundaries.



insert study area map



2.0 OVERVIEW OF KEY ISSUES

2.1 Safety

The primary reason for the development of the US 20 corridor plan is to formulate a systematic approach to improving safety throughout the corridor. Several factors combine on the highway between Idaho Falls and Chester that contribute to the safety problems experienced. First, the configuration of the corridor leads to excessive speed on the highway. The US 20 corridor is posted at 55 miles per hour, but the 85th percentile speed, the speed that typically determines the posted speed, is 68 miles per hour. Drivers on the corridor have the perception that it is safe to drive at higher speeds.

The safety issue arises because the facility is not an interstate facility, despite a perception to the contrary. Traffic flows are not even, vehicles enter and exit the facility at random locations, and intersections are not grade-separated. When this road was designed, the posted speed limit on all highways was 55 miles per hour. At that speed, safety issues associated with cross traffic are not as prevalent.

US 20 is the highest volume route into Yellowstone National Park, and the primary access to Island Park, a 30-square-mile recreational area in the mountainous portion of eastern Idaho. Many out-of-area tourists travel this route. These drivers may not be aware of the at-grade cross traffic and may be surprised by a vehicle crossing in front of them. The lack of corridor familiarity may be further compounded by lack of experience operating a recreational vehicle or towing a trailer, all of which should lead to lower, not higher, overall speeds.

Finally, population and employment growth have stimulated development or intensified

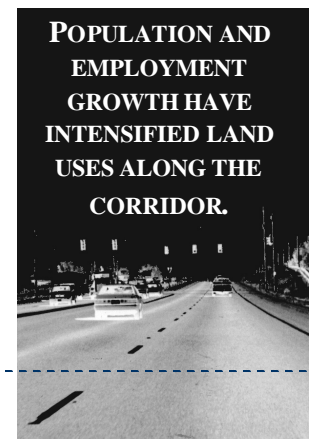
land uses along the corridor. This development has served to create more demand at intersections for access, and has resulted in more cross traffic. The business investments adjacent to the corridor are substantial. Business owners often perceive that their success is tied to ready access from the corridor.

Given the present state of corridor development—(1) approximately 44 miles of four-lane configuration, (2) business interests needing corridor access, (3) the mix of vehicle and driver types, and (4) the speed at which the road is being traveled—the best way to improve safety on this corridor is to limit its accesses. This plan recommends limiting access to the highway (i.e. no direct driveway or county road accesses) on all but the lowest volume four-lane segments.

2.2 Land Use around Interchanges

Over the next 20 years, ITD plans to make a substantial investment in the development of US 20, including nine new interchanges. Seven of those nine are already in ITD's program for development and funding. These projects represent approximately \$50 million that the State will be investing over the next 10 years. It is incumbent upon the State to ensure that these investments of taxpayer funds are maximized and protected.

Interchanges, particularly in urban areas, are often the focus of intense land-use development. Several factors stimulate this development. First, urban interchanges concentrate large volumes of automobile and truck traffic onto a few local streets. Concentrations of traffic are desirable to businesses that rely on pass-by traffic. Such



businesses include gas stations, fast food restaurants, and convenience stores.

Second, when new interchanges are constructed in undeveloped or sparsely developed areas, large tracts of land become available for purchase in the interchange area. These large tracts are particularly appealing to commercial uses (like department stores, factory outlet malls, big box commercial centers, and furniture stores) that need the convenience of easy on-and-off access and large parcel sizes.

Finally, when interchanges are constructed, particularly in less populated settings such as US 20, a capacity benefit is added to the surrounding roads. A significant new capacity has been added by the improvement, which makes access to the surrounding land areas convenient. There is a motivation for businesses to locate in the area of the added capacity.



The Telford industrial park is located just off of US 20 in the Idaho Falls urban area. This area will have access to a new interchange at St. Leon Rd.

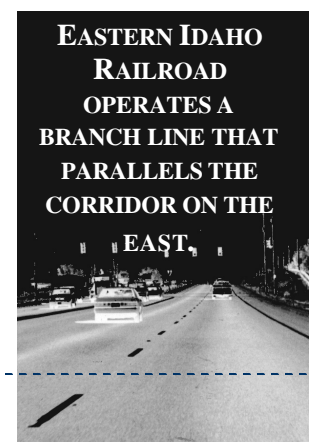
Too often the consequence of development around new interchanges is that the commercial activities eventually begin to create congestion. The benefits of the improvement are lost and the safety of the system compromised.

Making matters more difficult, businesses locating near interchanges oftentimes place their buildings in very close proximity to the interchange ramp terminals and to each other. If each business constructs an individual driveway, located adjacent to another driveway serving the next-door business, traffic flow on public streets near the interchange is disrupted. Through vehicles are required to slow as vehicles turn into or out of driveways serving adjacent businesses.

One way to prevent congestion near interchanges is to purchase the access rights within the operational domain of the interchange and disallow accesses to be placed within these areas. Alternatively, ITD could enter into an agreement with the county or city to ensure that any future development would be required to mitigate its adverse impacts to the capacity of the interchange or the approach roads. Part of this agreement would be to specify the parcels in question and to determine an appropriate distance for impact consideration. Of course, use of an agreement presumes that the mitigation will be affordable and implemented in a timely manner. Neither assumption can be assured, given the extreme expense of some improvements (i.e. lane additions on the overpass or purchase of developed properties adjacent to the street to permit widening) and the ravages of the business cycle. Therefore, the agreement option poses the risk that the safety and efficiency of the interchange area may be placed in jeopardy.

2.3 Railroad Crossings

Eastern Idaho Railroad, a short line carrier, operates a branch line that parallels the US 20 corridor on the east. As decisions are made



to close and improve US 20 roadway connections, the treatment of at-grade railroad crossings should be examined simultaneously. When US 20 street connections are eliminated, and closure of the at-grade rail crossing is not possible, the appropriateness of signals and gates should be reviewed. New interchange areas should include examination of the feasibility of separating the roadway grade from the railway grade.



In places along the corridor, US 20 right-of-way ends at the Eastern Idaho Railroad right-of-way.

2.4 Bicycles and Pedestrians

Bicycle usage on the US 20 corridor is growing. Safety is a concern to both cyclists and motor vehicle operators. This section of US20 is listed as a “most suitable” corridor according to the Idaho Bicycle Guide, but the infrastructure along the study portion of US 20 is not bicycle-friendly. Inadequate shoulder width and rumble strip configuration make bike riding difficult. Infrastructure improvements are needed to accommodate this mode.

Not very many pedestrians use US 20 for a walking facility, with the possible exception

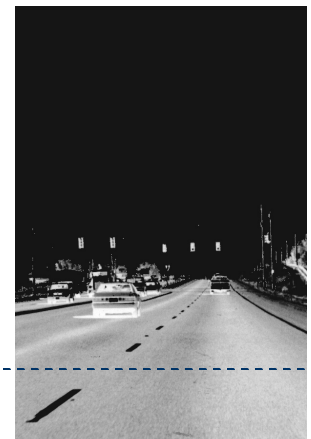
of school-aged children walking to a bus stop along the corridor. The safety issue that was most often expressed was a concern for people who wanted to cross the corridor. Because of this concern, cross-corridor connections are addressed in the recommended alternative.

2.5 Slow-Moving Vehicles

Because of the diversity of land uses and the type of activities located in and around the US 20 corridor study area, many slower-moving vehicles use this roadway. Examples are: school buses, recreational vehicles, agricultural equipment, and farm service vehicles. Sections of highway presently have inadequate shoulders, which can cause congestion and potentially hazardous vehicle interaction, particularly when agricultural equipment uses the highway.

2.6 Capacity of Local Roadways

The analysis for this plan recommends closure of many existing access points. The availability of local service roads has been an issue in determining which intersections to close and which ones to improve. ITD cannot reasonably close an intersection that has no alternative access point to the highway, nor can it leave hazardous intersections intact. Thus, in the development of this plan, adequate county road connections were important in establishing the recommended alternative. In certain areas, additional connections need to be made to avoid placing unreasonable burden on the local residents and businesses. Some roads will be recommended for County upgrade as a result of the development of the recommended alternative.



2.7 Environmental Concerns

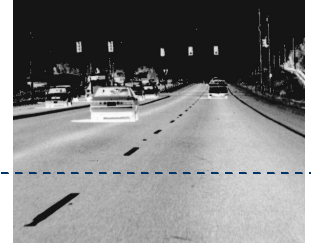
Overall, the environmental issues in and around the US 20 corridor area are minimal. The environmental scan for the corridor did not produce any fatal flaws existing within the corridor that would preclude making improvements within a given area. This plan does propose to construct a new bridge over the South Fork of the Snake River at Lorenzo. This bridge would be placed between the existing highway bridge and the existing railroad bridge, approximately 100 feet upstream from the highway.

The South Fork of the Snake River is considered by the US Fish and Wildlife Service to be Idaho's most unique riparian ecosystem and the most important fish habitat in the State of Idaho. It contains the largest continuous cottonwood ecosystem in the state. Bureau of Land Management records identify one osprey nest within the corridor at this bridge crossing and another nest approximately 300 yards down river. This area also has significant bald eagle nesting habitat.



South Fork of the Snake River

**MANY EXISTING
ACCESS POINTS
ARE BEING
RECOMMENDED
FOR CLOSURE.**



3.0 GOALS AND OBJECTIVES

In September of 1998, ITD held a stakeholder workshop that was designed to identify goals and objectives for the development of the corridor plan and to guide the development of the US 20 Corridor Plan Purpose and Need Statement. The following are the Corridor Plan Goals and Objectives, followed by the Corridor Plan Purpose and Need Statement.

Goal I--Reduce accidents on the corridor.

Objectives:

- A. Address existing and future land uses in and around the corridor, including effects of direct access and left turns.
- B. Speed in the corridor is higher than posted. Reduce speeds through driver education and information posted on the corridor. Improve the facility to be safer at higher speeds.
- C. Address substandard geometrics.
- D. Ensure adequate sight distance at all corridor intersections and interchanges.
- E. Address needs of agriculture and slow-moving vehicles within and crossing the corridor to decrease conflict potential.
- F. Address interchange placement to avoid weaving traffic movement and other unsafe conditions.
- G. Address bicycle and pedestrian safety needs.
- H. Limit and improve at-grade intersections and access points.
- I. Address long combination vehicles' needs for turning, acceleration, and deceleration.
- J. Improve corridor lighting and directional markings.
- K. Address and reduce rail/motor vehicle conflicts.
- L. Investigate integrated highway information systems.

- M. Investigate the need for school bus turnouts and crossing provisions.
- N. Widen shoulders where inadequate and investigate turnouts on the two-lane segment.

Goal II--Provide for efficient movement of goods and people passing through the corridor.

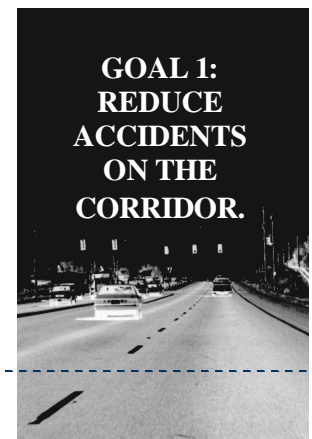
Objectives:

- A. Decrease directional changes in Idaho Falls.
- B. Improve sight distance at intersections.
- C. Improve directional signage and routing of through traffic.
- D. Add turnouts and widen shoulders where needed.
- E. Provide acceleration/deceleration lanes where appropriate.
- F. Control access and increase posted speed.
- G. Provide local alternatives to highway by improving local circulation.
- H. Add interchange facilities.
- I. Add transit, park-n-rides, carpools, and vanpools.

Goal III--Maintain a viable interrelationship between land use and the transportation system.

Objectives:

- A. Preserve and promote business opportunities in the corridor by making reasonable, safe, and efficient accommodation for business access from US 20.
- B. Minimize and mitigate impacts of highway improvements on adjacent land uses.

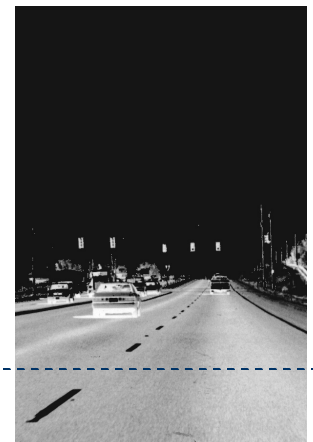


- C. Ensure that the STIP (Statewide Transportation Improvement Program) development process considers impacts to local business planning.
- D. Develop land use policies that promote efficient use of highway capacity and land resources.
- E. Support local comprehensive plan goals to preserve agricultural land resources adjacent to the corridor.
- F. Preserve needed land resources for corridor improvements.
- G. Provide access to recreational land uses.
- H. Ensure adequate rest facilities on the corridor.
- I. Enhance the corridor through development of interpretive centers, cultural sites, and scenic attractions.
- J. Establish and formalize a process for communication between local government land-use authorities and transportation service providers.
- K. Adopt access standards for US 20 that ensure adequate separation between street intersections/interchange ramps and private accesses.

Goal IV--Preserve and enhance environmental resources.

Objectives:

- A. Maintain critical habitat.
- B. Preserve and replace wetlands impacted by corridor development.
- C. Minimize noise impacts on adjacent land uses.
- D. Control runoff impacts on adjacent land uses.
- E. Recognize and protect the unique ecosystem around the US 20 river systems.



4.0 US 20 CORRIDOR PLAN PURPOSE AND NEED

The US 20 corridor serves interstate, regional, and local needs and is the key link between Idaho Falls and the numerous communities and rural areas in the upper Snake River Valley. This corridor also serves as a primary gateway to the Yellowstone National Park area and provides access to major resort areas and scenic byways in Idaho, Montana, and Wyoming.

The purpose of the US 20 Corridor plan for the segment between the western edge of Idaho Falls at milepost 304.528 and the Ashton Hill Bridge at milepost 363.370 is as stated:

- to identify alternatives that provide for a safe and efficient transportation system for movement of people and goods within and through the corridor;
- to preserve and protect the environment, built and natural, and improve the interrelationship between land use and transportation, and;
- to provide a framework for future transportation project selection and development.

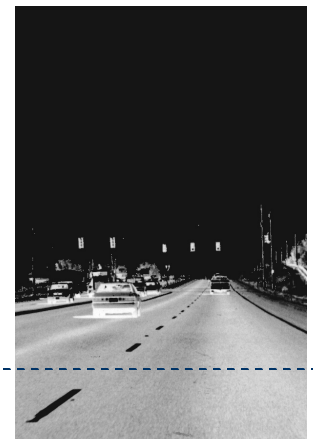
This plan is being developed in response to many factors as identified through stakeholder interviews, discussions with ITD and local agency staff, public open houses held on the corridor, observations made through the environmental scan, and findings of the existing conditions report.

Need for the corridor plan has been indicated by many factors. The corridor plan must respond to:

- High accident severity and rate. Accidents within segments of the corridor are higher than the state average for similar corridors.

That might be partially explained by the road having the look and feel of an interstate highway facility; thus people have a tendency to travel at interstate speeds (75 mph in Idaho). This road is posted at 55 mph due to numerous at-grade intersections which allow traffic to cross all four lanes of the highway.

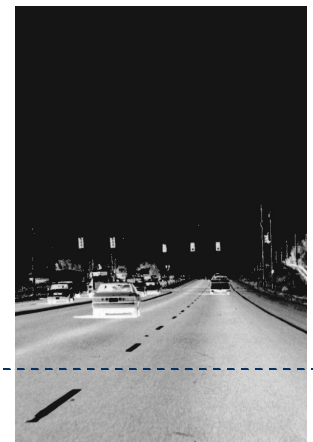
- Over the past few years, an increase in commercial and residential development in traditionally rural areas in and around the corridor has led to more commuter demands being placed on the facility and has created peak hour congestion on side streets accessing the highway.
- Urbanization of the rural areas has increased cross traffic on what once were little-used cross streets. Increased traffic crossing from side streets has created conflicts between driver perception of the roadway character (i.e. it feels safe to travel at higher speeds) and its current state of operation.
- Growth of the regional economy as well as the region itself has created the need to improve the through movement operations of the corridor.
- Local development patterns along the corridor require safe passage along and across the road for all users including motorists, bicycles, pedestrians, and buses.
- Much of the land abutting the corridor is predominately rural in nature. Agricultural vehicles and farm implements often use the road to move products or to move from one



field to the next, creating a conflict between slow-moving farm machinery and vehicles at highway speed.

- Finally, US 20 acts as a gateway from points south and west to some of the most highly used recreational areas in the country. This creates conflict on the corridor in two ways. First, many people travel to these areas either in slower moving motor homes, or with trailers and/or boats in tow. These vehicles create variation in speed between different elements in the traffic stream. Second, for many drivers, the road is unfamiliar, and they may not be expecting to have to watch for cross traffic since the facility looks like an interstate highway and feels safe to drive at higher speeds. This lack of awareness can lead to lapses in judgement for the unfamiliar motorist, creating a safety concern.

These factors justify the need for the corridor plan and help to give the plan guidance as it addresses the issues and attempts to balance the competing interests in the corridor.



5.0 EXISTING CONDITIONS

US 20 from Idaho Falls to Ashton is on the National Highway System for the State of Idaho. This route is primarily a four-lane divided highway facility within the boundaries of this corridor plan. There are exceptions however: approximately three miles in the Idaho Falls urban area is a five-lane urban arterial, and approximately 10.5 miles on the north end of the corridor is two-lane highway.

For the purposes of this section, the corridor descriptions are divided by transportation mode of travel, rather than by segment. Many of the descriptions and tables, however, will include segment information.

5.1 Roadway

To describe the conditions of the highway itself, two distinct areas need to be considered. First are the geometrical standards of the road regarding roadway width, shoulder width, and condition of the pavement. Second are the operational standards of the highway, any level of service problems, and safety concerns on the highway. The highway's physical conditions will be explored and then its operational characteristics.

5.2 Roadway Geometrics

5.2.1 Travel Lanes

The Idaho State Highway Plan recommends that, during reconstruction projects, ITD attempt to upgrade US 20 to four 12-foot lanes with right-of-way widths of 200 feet for divided sections and 150 feet for undivided sections from Idaho Falls to Ashton.

Based upon that recommendation, the following two tables show the sections of US 20 that do not have the recommended four lanes and/or adequate right-of-way width.

Currently, all lanes on US 20 between Idaho Falls and Ashton are at least 12 feet wide.

5.2.2 Shoulders

Smooth, paved roadway shoulders offer a suitable area for bicycling and walking, and minimize conflicts between these users and faster-moving motor vehicle traffic. To accommodate pedestrians and bicyclists, roadway shoulders should be six feet wide or greater. Table 3 lists the sections of US 20 in the study area that do not provide the necessary paved shoulder width on both the right and left shoulders.



Insufficient shoulder located north of Rexburg.

While the left-hand shoulders vary in width, the majority of the corridor has a 10-foot paved right-hand shoulder. Lack in continuity, particularly where the right shoulder has been poorly maintained and the edge of the shoulder has been allowed to crumble, can be difficult to negotiate for a cyclist or a vehicle pulling out of the traffic stream.

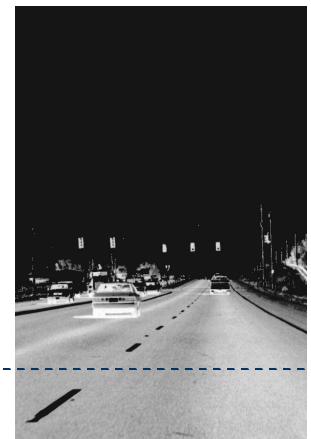


Table 1: Lane Number Deficiencies

Segment	Highway Section (Mile Posts)	Approximate Location	Number of Lanes
7	352.94 - 360.34	800 N Road right turn and left turn to entering city limits of Ashton	2
7	360.57 - 364.96	Junction SH-47 right turn; 1300 N Road left turn to approx 1.5 miles past N River Rd (to boat docks) left turn	2

Table 2: Right-of-Way Deficiencies

Segment	Highway Section (Mileposts)	Approximate Location	Right-of-Way Width
1	305.97 - 305.995	Just past Broadway St and Coachman Drive left turn	95
1	306.00 - 306.82	Beginning E. Lateral Canal to Broadway St., just past Saturn Ave. right and left turns	95
1	306.82 - 306.833	Just past Saturn Ave. right and left turns, before S. Colorado	60
1	306.833 - 306.85	In the vicinity of Broadway St. and S. Colorado Ave. right turn	80
1	306.90 - 307.82	Junction southbound on/off ramps I-15 Broadway Interchange #118 to end of eastbound on ramp interchange #307	150
1	308.75 - 308.80	Outside Idaho Falls city limits just past Science Dr./ RR overpass interchange #309	170
1	309.02 - 311.90	Outside Idaho Falls city limits to just past the beginning of the North Fork Willow Creek Bridge	170

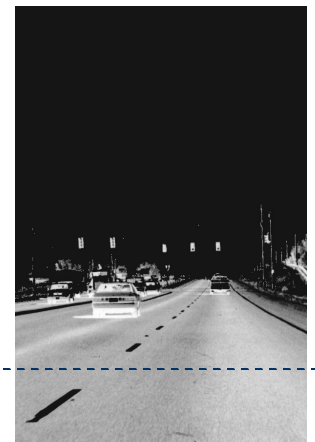


Table 2: Right-of-Way Deficiencies continued

1	311.90 - 312.22	Just past the beginning of the North Fork Willow Creek Bridge	90
1	312.22 - 314.46	Just before Tower Rd. (65th N) right and left turns to approx 2.5 miles past the beginning of the Sage Canal Bridge	170
1	314.84 - 314.89	Between eastbound and westbound off-ramps interchange #315	90
1	314.89 - 314.98	In the vicinity of the eastbound off-ramp interchange #315	170
2	315.20 - 315.24	In the vicinity of the RR and SH-43 interchange #315	170
2	315.36 - 315.38	Entering the city limits of Ucon	170
2	321.05 - 321.08	Entering the city limits of Rigby	50
3	325.57 - 325.72	Just before beginning of Island Canal to just before automatic traffic counter station #51	50
3	326.24 - 326.27	End of Lorenzo/ Snake River Bridge to beginning of Bannock Jim Slough Bridge	50
3	327.85 - 327.95	In the vicinity of the Liberty Park Canal Bridge	100
4	338.73 - 338.93	Outside of the Sugar City city limits to the Junction of SH-33 Spur right turn; 4000N Rd. left turn	100
6	349.32 - 349.63	2650E Road right turn; Sportsman Access Road right turn to North Bridge Fall River Canal Bridge southbound lane	100
7*	353.40 - 356.77	300 E Road right and left turns to 1000 N Road right turn	160
7*	356.77 - 357.17	In vicinity of 1000 N Road right turn	90
7*	357.17 - 359.91	In vicinity of 1000 N Road right turn to end of left turn turnout before 3500E Road	160

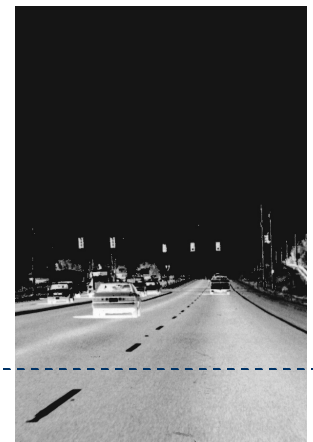


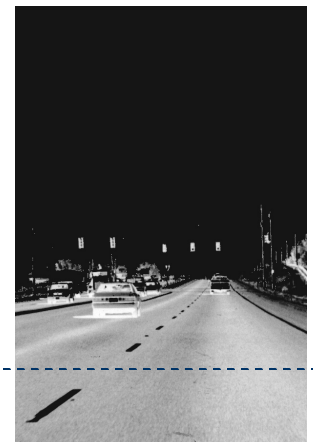
Table 2: Right-of-Way Deficiencies continued

7*	359.91 - 360.02	In the vicinity of 3500E Road left turnout	120
7*	360.02 - 360.39	In vicinity of 3500 E Road	160
7*	360.39 - 360.95	Within city limits of Ashton	120

* While this segment only has two lanes, the corridor plan recommends **not** changing this situation over the 20-year life of the plan.

Table 3: Shoulder Width Deficiencies

Segment	Highway Section (Milepost - Milepost)	Approximate Location	Shoulder Width (feet)	
			Rt. Paved	Lt. Paved
1	307.45 - 307.70	Vicinity of I-15 overpass	0	0
1	307.70 - 308.44	Lindsay Blvd overpass Interchange #307 to westbound on- ramp IC #309	10	0
1	308.44 - 309.13	Westbound on-ramp interchange #309 to just before entering city limits	10	2
3 – 4	331.43 - 333.43	Entering urban limits of Rexburg to SH- 33 overpass IC #333	8	2
4	343.35 - 344.31	Beginning of east- bound off-ramp interchange #344 to .26 miles past Salem Union Canal	10	3
6 – 7	352.94 - 364.96	Just past 800N Road right and left turns, to 1.5 miles beyond N. River Road (to boat docks) left turn	8	0



5.2.3 Vertical Alignment

Vertical alignment measures the amount of elevation change in a particular roadway. The Idaho Transportation Department (ITD) as flat defines the terrain in the US 20 corridor study area. All grades and vertical curves on the highway meet design standards and are appropriate for flat terrain.

5.2.4 Horizontal Alignment

Horizontal alignment measures the degree of turns and bends in the road. According to ITD records, all horizontal curves meet design standards appropriate for the study section of US 20.

5.3 Pavement Condition

ITD classifies pavement condition as Good, Fair, Poor, or Very Poor. All sections of paved highway in Idaho are assigned a Cracking Index (CI) and a Roughness Index (RI). The pavement condition is determined by the lower value of either the Cracking Index (CI) or the Roughness Index (RI). Sections of pavement on US 20 with deficient pavement conditions are listed in Table 4. The total mileage of roadway that is deficient comes to 15.55 miles. This represents over 26 percent of the entire project area.



Poor pavement condition east of Chester, Idaho.

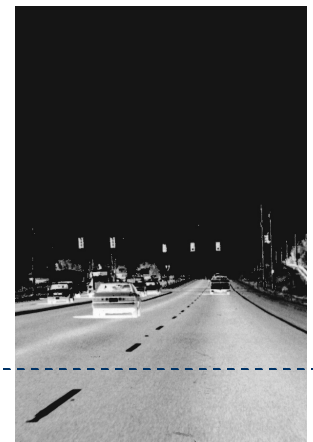


Table 4 : Pavement Deficiencies

Segment	Highway Section (Mileposts)	Approximate Location	Pavement Condition
1	307.01 - 307.10	Between interchange 118 and 119	Very Poor
1	307.98 - 308.00	Junction Eastbound off/ Westbound on-ramps IC #308	Very Poor
1	310.01 - 310.10	Eastbound on-ramp on ramp IC #310	Very Poor
1	312.00 - 312.10	Vicinity of N Fork Willow Creek Bridge	Poor
1	313.01 - 313.10	Anderson Canal Bridge	Very Poor
1	313.90 - 314.00	Ririe Outlet Canal Bridge – southbound lane	Poor
1	314.01 - 314.10	Ririe Outlet Canal Bridge – northbound lane	Very Poor
1	314.50 - 314.60	Fairview Road (97th N)	Poor
1	314.70 - 314.80	.2 mile past Fairview Road	Poor
2	315.01 - 315.10	Vicinity Ucon Cemetery Road (105th N)	Very Poor
2	315.40 - 315.50	City limits of Ucon	Poor
2	315.80 - 316.01	Outside Ucon city limits – just past eastbound on-ramp IC#315	Poor
2	316.01 - 316.40	Between on-ramp IC #315 and Coltman Road	Very Poor
2	316.50 - 316.70	Between on-ramp IC #315 and Coltman Road	Poor
2	316.80 - 316.90	Coltman Road (129th N)	Very Poor
2	316.99 - 317.00	Just past Coltman Road	Very Poor
2	318.10 - 318.20	Harrison Canal	Very Poor
2	318.20 - 318.30	Harrison Canal	Poor
2	318.80 - 318.90	Vicinity of Harrison Canal	Poor
2	319.01 - 319.88	Vicinity 100N Road	Very Poor
3	323.19 - 323.69	North Rigby Canal	Poor
3	323.69 - 323.89	Snake River/ Drybed Canal Bridge	Very Poor
3	323.89 - 326.93	Snake River/ Drybed Canal Bridge to past 4300W Road left turn	Poor
4	339.30 - 339.40	Just before N Fork Teton River Bridge	Poor

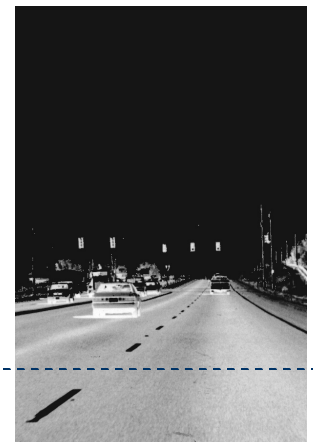
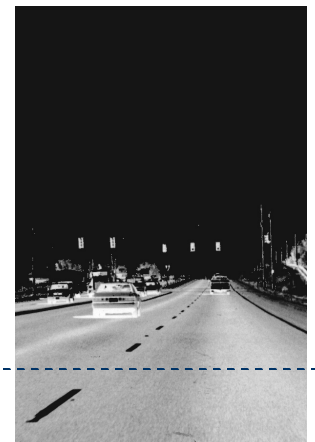


Table 4: Pavement Deficiencies continued

4	341.20 - 341.30	Just inside Fremont County limits	Poor
5	345.64 - 345.95	Center Bridge Street UP IC #346	Very Poor
5	345.98 - 346.01	Leaving St. Anthony city limits	Poor
5 – 6	346.60 - 350.73	.6 miles outside St. Anthony city limits to 700N Road	Poor
7	355.00 - 355.01	Truck scale (Satellite Poe)	Poor
7	357.10 - 359.40	100N Road to just past Reclamation Road	Poor
7	361.50 - 361.70	Just past ITD Maintenance Yard #61500	Poor
7	361.70 - 361.90	Just past ITD Maintenance Yard #61500	Very Poor
7	362.20 - 362.30	1475N Road	Poor



5.4 Bridge Inventory

Bridges in Idaho are assigned a sufficiency rating between 0 and 100, with a rating of 100 representing the best possible conditions. The bridge's structural adequacy, compliance with current design standards, importance for public use, and eligibility for federal bridge replacement funds determine bridge sufficiency ratings. A bridge sufficiency rating below 50 indicates that the bridge needs to be replaced. Ratings between 50 and 80 imply that the bridge is in fair condition, and that rehabilitation, if cost effective, will bring the bridge up to current standards. Those bridges on US 20 within the corridor study area that need to be replaced or rehabilitated are listed in Table 5.

As Table 5 shows, there are no bridges with sufficiency ratings below 50, indicating a need to be replaced. Three bridges on US 20 have ratings between 50 and 80 and should be considered for rehabilitation.

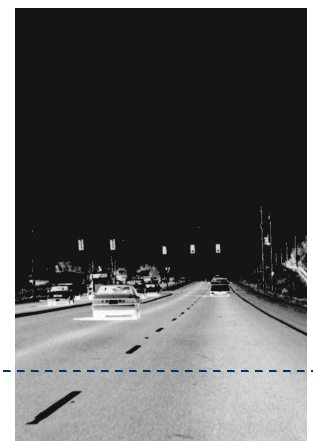
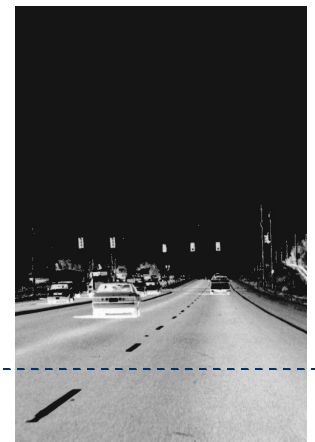


Table 5: Bridge Conditions

Segment	Highway Section (Mileposts)	Approximate Location	Sufficiency Rating
1	307.668 – 307.695	Railroad Overpass in Idaho Falls – Just past IC#119	78.5
1	308.120 – 308.150	Riverside Drive Overpass – IC #308	73.0
7	353.691 – 353.694	Curr Canal Bridge	66.3

Source: ITD Bridge Section



5.5 Access Management

Within the corridor study area ITD is the only agency that has any policy governing access management. Within the urban area and on West Broadway Street, access to the highway is managed at a level commensurate with the surrounding land use. This area does allow direct drive way access and has a center turn lane for vehicles to exit the traffic stream prior to making a turn.

The remainder of the highway has no direct driveway accesses but does have 26 at-grade crossings and two farm-field access points. The major result of this planning effort has been to better manage these accesses through closures and improvements to the intersections.

5.6 Utilities

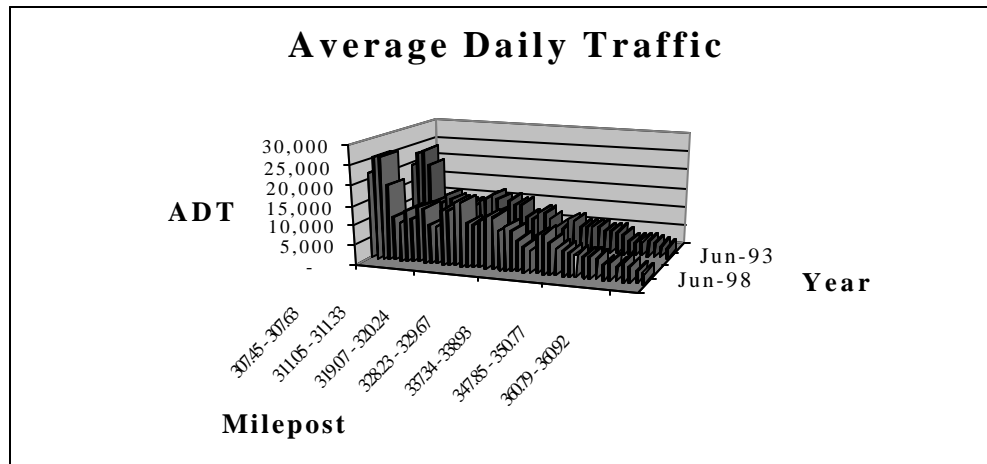
Information regarding the location and existence of utilities in the US 20 corridor study area is not available at this time.

5.7 Operational Characteristics

5.7.1 Traffic Volumes

Average Daily Traffic Volumes (ADT) on US 20 were obtained from ITD for the five years from 1993 to 1998. From these volumes, an average annual growth rate was calculated for individual sections of the highway. The following charts and tables illustrate the ADT in 1998, and the average annual growth rate in traffic on US 20 from 1993 to 1998.

The following table shows the average daily traffic volumes for the US 20 corridor from June of 1998, and corresponds with the traffic information presented in the figure.



The following table shows the average daily traffic volumes for the US 20 corridor from June of 1998, and corresponds with the traffic information presented in the figure above.

Table 6: Average Daily Traffic Idaho US 20 - 1998

Highway Section (Milepost - Milepost)	Jun-98	Highway Section (Milepost - Milepost)	Jun-98
307.45 - 307.63	22,000	329.67 - 331.63	11,000
307.63 - 307.82	26,000	331.63 - 332.27	10,000
307.82 - 308.32	26,000	332.27 - 333.19	8,000
308.32 - 308.50	19,000	333.19 - 333.70	6,400
308.50 - 309.60	11,000	333.70 - 336.53	5,800
309.60 - 310.13	10,000	336.53 - 337.34	9,700
310.13 - 311.05	13,000	337.34 - 338.93	10,000
311.05 - 311.33	11,000	338.93 - 341.38	8,000
311.33 - 313.39	14,000	341.38 - 342.54	6,600
313.39 - 314.51	14,000	342.54 - 343.64	6,500
314.51 - 314.92	10,000	343.64 - 345.20	6,100
314.92 - 315.57	9,800	345.20 - 345.97	5,700
315.57 - 316.80	14,000	345.97 - 347.85	5,400
316.80 - 319.07	14,000	347.85 - 350.77	5,600
319.07 - 320.24	16,000	350.77 - 352.74	5,200
320.24 - 320.38	16,000	352.74 - 353.40	3,900
320.38 - 321.63	11,000	353.40 - 359.34	4,300
321.63 - 322.08	11,000	359.34 - 360.42	3,600
322.08 - 325.64	12,000	360.43 - 360.57	4,600
325.64 - 326.81	13,000	360.57 - 360.79	3,700
326.81 - 328.23	13,000	360.79 - 360.92	3,000
328.23 - 329.67	9,900	360.92 - 361.82	2,600

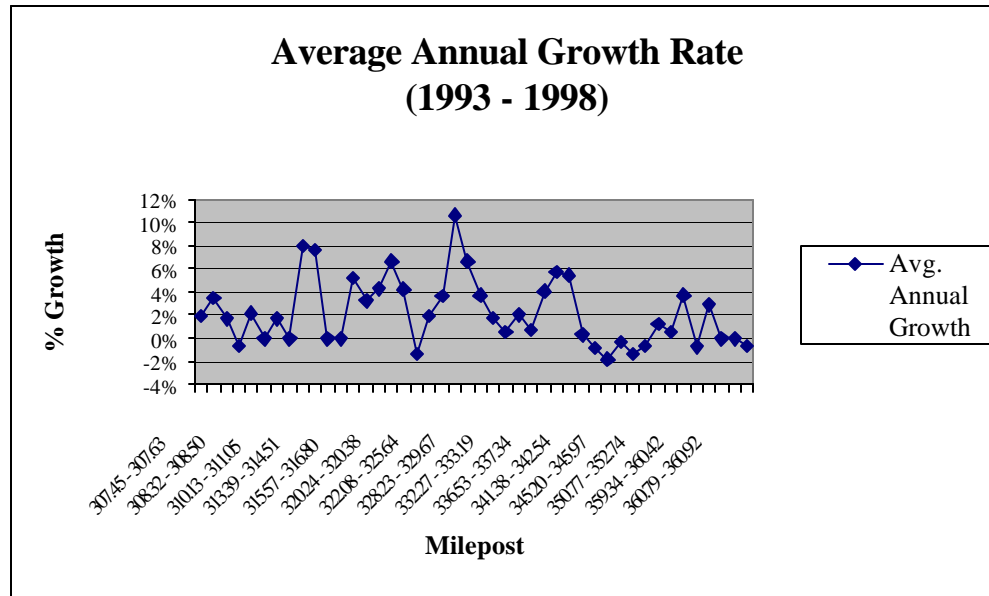
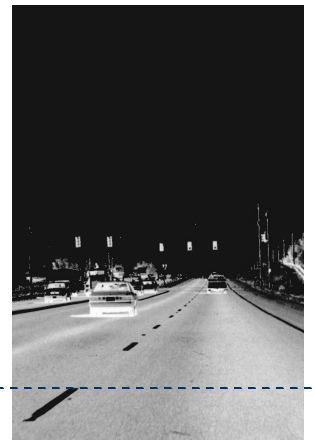


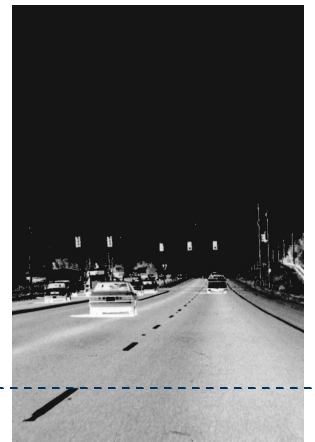
Table 7: Average Daily Traffic Idaho US 20 – 1993-1998

Highway Section (Milepost – Milepost)	Growth Rate 1993-1998	Highway Section (Milepost - Milepost)	Growth Rate 1993-1998
307.45 - 307.63	1.95%	329.67 - 331.63	3.74%
307.63 - 307.82	3.48%	331.63 - 332.27	1.74%
307.82 - 308.32	1.70%	332.27 - 333.19	0.51%
308.32 - 308.50	-0.65%	333.19 - 333.70	2.02%
308.50 - 309.60	2.16%	333.70 - 336.53	0.71%
309.60 - 310.13	0.00%	336.53 - 337.34	4.07%
310.13 - 311.05	1.67%	337.34 - 338.93	5.69%
311.05 - 311.33	0.00%	338.93 - 341.38	5.45%
311.33 - 313.39	8.00%	341.38 - 342.54	0.31%
313.39 - 314.51	7.58%	342.54 - 343.64	-0.88%
314.51 - 314.92	0.00%	343.64 - 345.20	-1.79%
314.92 - 315.57	0.00%	345.20 - 345.97	-0.34%
315.57 - 316.80	5.17%	345.97 - 347.85	-1.35%
316.80 - 319.07	3.21%	347.85 - 350.77	-0.69%
319.07 - 320.24	4.30%	350.77 - 352.74	1.21%
320.24 - 320.38	6.67%	352.74 - 353.40	0.53%
320.38 - 321.63	4.20%	353.40 - 359.34	3.72%
321.63 - 322.08	-1.33%	359.34 - 360.42	-0.77%
322.08 - 325.64	1.95%	360.43 - 360.57	2.91%
325.64 - 326.81	3.61%	360.57 - 360.79	0.00%
326.81 - 328.23	10.64%	360.79 - 360.92	0.00%
328.23 - 329.67	6.66%	360.92 - 361.82	-0.69%

**INSERT MAP OF CORRIDOR
SHOWING ADT IN 1998**



Insert map 2 showing adt in 1998



5.7.2 Level of Service

ITD uses both level of service (LOS) and the volume/capacity (V/C) ratio as measurements of roadway congestion. Capacity is the maximum number of vehicles that can pass over a given section of roadway during a certain time period under prevailing roadway and traffic conditions. V/C ratios range from 0 (no congestion) to 1.00 (severe congestion). The V/C ratios correspond to LOS, which is broken into six categories, “A” through “F,” with “A” representing ideal conditions and “F” representing the worst conditions. The relationship between LOS and the V/C ratio is based on methodology presented in the *Highway Capacity Manual*.

The Idaho State Highway Plan lists the standards presented in the following table for all roadways in the state. These criteria indicate that roadways providing approximately LOS “D” or less are considered at or near congestion.

**Table 8: State Highway Plan
Volume/Capacity Standards**

	Near Capacity V/C		At Capacity V/C	
	Urban	Rural	Urban	Rural
Two Lane Hwy	0.60	0.39	1.00	0.62
Three or More Lane Hwy	0.79	0.75	1.00	0.89

The 1998 volume to capacity ratios for US 20 within the corridor study area were obtained from ITD for analysis. No sections of US 20 were found to be at or near capacity under present traffic conditions.

5.7.3 Intersection Turning Movements

Traffic counts for AM and PM peak hours for major intersections on US 20 were completed in October and November of 1997 by ITD.

The number of passenger and commercial vehicles turning onto and off US 20 is shown in the appendix. For purposes of this analysis, since no one movement at any intersection was even approaching capacity, the turn movements were added together for each intersection, giving a view of the total intersection activity. This measurement was then used to analyze the intersection operation.

5.8 Operational Problems

5.8.1 Problem Areas

Two areas in cities do not work well operationally within the corridor.

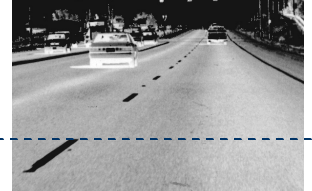
- **Idaho Falls**

Within Segment 1, the area between Interstate 15 and the Lewisville highway has many operational difficulties. A refinement plan, included in this document, focuses on that particular area, which contains five interchanges and a river crossing within a two-mile length. The concentration of these interchanges and the amount of local traffic that is accessing the road has led to capacity constraints and weaving movement conflicts.

- **Ashton**

The City of Ashton is on the two-lane portion of the corridor in Segment 7. This area is beginning to grow and experience a vast influx of summertime traffic. During the peak tourist and sportsman seasons, this very small city must accommodate traffic far greater than its population would ever produce. A part of the problem Ashton is experiencing might be solved by upgrading the city infrastructure around US 20. The community has no sidewalks, bicycle lanes, and very little street

**ITD USES BOTH
LEVEL OF SERVICE
AND
VOLUME/CAPACITY
RATIO AS
MEASUREMENTS OF
CONGESTION.**



lighting along the corridor. Improving the infrastructure of this community along the US 20 corridor would force traffic to move through the community in a more orderly manner.

By installing sidewalks and bicycle lanes, the city residents can feel comfortable walking or biking to local events or commercial areas. This separation of travel modes will give a more serene feel to local residents. The installation of bicycle lanes will cause the roadway to be narrower and more defined, encouraging traffic to slow down through town.

One other important aspect of upgrading Ashton's infrastructure would be to install some type of access management within the community (i.e. curb and gutter with defined driveway access points). Presently, traffic patterns may be confusing and frustrating because there are no defined access points for local businesses fronting along US 20. This situation leads to various approach angles for turning traffic and generally adds to the chaotic feeling that local residents described during the summer season.

5.8.2 Geometrics

There are locations on the corridor where poor alignments and intersection geometry leads to reduced system performance. Several intersections on the corridor come through at awkward angles, while others have sight distance problems. Still other intersections are too close together for proper operation of the corridor. The following is a segment-by-segment description of operational problems that have been identified through the corridor planning process.

5.8.2.1 Segment 1

Operationally Segment 1 has the highest volume of turning movements on the corridor at St.

Leon and Hitt Roads. Hitt Road has acceptable geometrics; however, due to the near proximity of the train tracks, any queuing backs up over the railroad tracks if a truck is at the stop sign. St. Leon and the Telford Road intersections are very close together, leading to weaving problems. St. Leon Road crosses US 20 at much less than 90 degrees. This angle is problematic particularly during peak hour when traffic queues form.

5.8.2.2 Segment 2

In Segment 2, the County line road that divides Bonneville and Jefferson County crosses the road at a steep angle and intersects the highway on a turn. The intersection has inadequate sight distance and needs lighting for night driving.

5.8.2.3 Segment 3

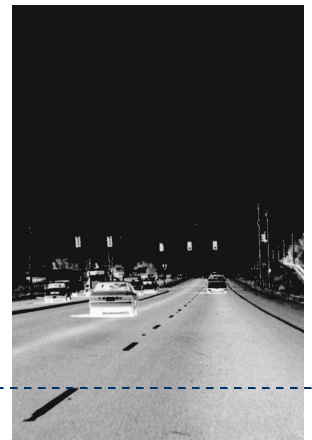
Intersection placement is a problem in Segment 3. There are four intersections clustered around the Snake River crossing in close proximity to each other. Operationally these intersections can be hazardous because of the clustering of turn movements. Also, the opening of Bear World has placed a large demand on the intersection serving the entrance. During the summer peak season, this crossing is serving far more vehicles per day than it has been designed to handle.

5.8.2.4 Segment 4

Within the next five years Segment 4 will be completely access-controlled.

5.8.2.5 Segment 5

The intersections in Segment 5 do not intersect the highway at a 90-degree angle, creating a long highway crossing distance. Wilford Road serves a great deal of rural cross traffic, as it is a



connection between two rural population centers.

5.8.2.6 Segment 6

The area in Segment 6 around the Fun Farm Road and Golf Course Road intersections has many design problems. The Fun Farm Road intersection is below a rise in the road to the north. This location creates a sight obstruction for all turning or crossing activity in the intersection. The Golf Course Road intersection is askew in its alignment and intersects the corridor next to two canal heads (one on either side of the corridor) making realignment cost prohibitive. This also adds another fixed-object hazard next to the highway.

5.8.2.7 Segment 7

The major problem in Segment 7 is the convergence of the four-lane segment to a two-lane section. In 1996 this location was the site of a fatal head-on collision. Improved signage in the area is required to ensure that such a tragedy does not recur. Some consideration might be given to heating the warning signs or coating them with oil-based lubricant in the winter to keep snow from accumulating and blocking important driver information.

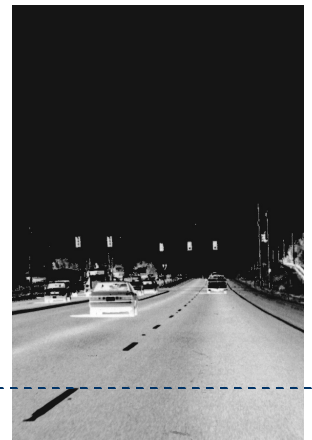
5.8.2.8 Corridor-Wide

As part of the public involvement process for development of the US 20 corridor plan, ITD held a stakeholder workshop. This meeting produced some issues that were pervasive throughout the corridor. The need for lighting was evident throughout the entire rural portion of the corridor. At night and in the winter it is difficult to tell where the intersections are located, and it is difficult to see if a vehicle is crossing until the US 20 driver is in close proximity to the crossing vehicle. Lighting the at-grade intersections would improve this situation.

Corridor signage needs to be improved. Signs that indicate intersections, lane changes, hospitals, and tourist attractions are scarce. Because US 20 is a divided four-lane facility, the signage should be to interstate standards to inform drivers of upcoming roadway activity. One suggestion was to place signs periodically along the highway informing drivers that this highway is not built to interstate standards and that speed limits are strictly enforced.

5.9 Accident Statistics

Accident statistics (1995 - 1997) provided by the ITD Office of Highway Safety were reviewed to establish areas on US 20 with high accident levels. The numbers of incapacitating injury accidents and fatal accidents were compiled for each mile point. The results are shown in the following table.



**Table 9: Accident Statistics**

Segment	Accident Location (MP)	Approximate Location	A-Injury Accidents	Fatal Accidents
1	309.963	Past end of Lewisville overpass IC#310 westbound lane	1	0
1	310.400	Automatic Traffic Counter Station #76	1	0
1	311.000	Just before Telford Road	1	0
1	311.049	Telford Road (49th N)	3	0
1	313.391	Hitt Road (25th E)	0	1
2	315.831	Outside Ucon city limits – just past end of eastbound on-ramp IC#315	1	0
2	316.778	Just before Coltman Road	1	0
2	316.796	Coltman Road (129th N)	1	0
2	320.067	Beginning of Garfield Ucon Canal Bridge	0	1
2	321.740	SH-48 overpass	1	0
3	324.400	Between W. LaBelle Canal Bridge and Menan Canal Bridge	1	0
3	326.000	Beginning of Lorenzo/ Snake River Bridge northbound lane	1	0
3	326.320	6800 S. Road right turn	1	0
3	326.400	Just past 6800 S. Road right turn	1	0
3	327.868	Liberty Park Canal Bridge	1	0
3	328.232	Connector Road (4985 S)	1	1
3	328.500	Just past Connector Road (4985S)	1	0
3	329.667	Burton Road (3800 S) left turn	1	0
4	334.094	Teton Island Canal	1	0
4	336.400	Just past maintenance crossover	1	0
4	338.200	City limits of Sugar City	1	0
4	338.331	3500 N Road	3	0
4	338.431	Just outside city limits of Sugar City	1	0
4	338.900	Just before junction SH-33 Spur Rt; 4000N Road left turn	0	1
4	339.907	.5 mile past beginning of N. Ford Teton River Bridge northbound lane	0	1
5	340.300	Just inside Fremont County limits	1	0
5	343.600	Beginning of Twin Groves Canal	1	0
5	347.090	Twin Groves Canal Bridge	1	0
5	347.500	Farmers Friend Canal Bridge	1	0
6	347.851	2600E Rd right turn; junction US-20B left turn	0	1
6	349.840	Vicinity of N. Br Fall River Canal Bridge	1	0
6	349.900	Vicinity of N. Br Fall River Canal Bridge	1	0
6	352.743	800 N Road	1	0
7	353.500	Past 3000 E Road	1	0
7	354.100	Beginning of turnout right turn	0	1
7	359.341	Reclamation Rd right turn; 1200 N Road left turn	1	0
7	360.472	Just past Idaho Street right turn	1	0



Insert accident map



Insert 2nd accident map

The US 20 corridor has a very high accident rate. Among the most severe accidents were six fatalities on the corridor within the three-year time period reviewed and 168 injury or fatal accidents between 1995 and 1997, for a total of 280 injuries and 7 fatalities. Accidents that produced only property damage were very high as well; approximately 300 property-damage-only accidents were reported during the same time period.

5.10 Traffic Control

Several traffic signals are located in the urban area section of US 20. The most controversial is located on US 20 at John's Hole. The signal was originally installed to clear the ramps exiting the northbound I-15 and keep vehicles from being backed up onto the mainline of the interstate. During evening peak hours congestion created a potential traffic hazard. The signal is now fully actuated; however, the City of Idaho Falls feels that the I-15 ramp is receiving more green time than is needed, resulting in increased vehicle delay for drivers using US 20 and its connecting local street network. The Bonneville Metropolitan Planning Organization and the Idaho Transportation Department are studying this situation to determine if a change in green time allocation is required.

5.11 Truck Percentages

According to data provided by ITD, commercial traffic accounts for approximately 10 percent of the total daily traffic on the corridor study section of US 20. This percentage fluctuates during the harvest season with additional truck loadings experienced in the fall from St. Anthony south to Idaho Falls.

5.12 Seasonal Traffic Variations

Traffic volume data from two permanent counters on US 20 was analyzed to reveal seasonal trends in average daily traffic volumes. Permanent counter number 32 is located on US 20, 17.5 miles north of Ashton, and permanent counter number 76 is located on US 20, three miles north of Idaho Falls. The counter data suggest that traffic volumes reach an annual high in August, and a low in January. Near Idaho Falls the traffic volumes in August are 18 percent higher than the annual average, and in January traffic volumes drop 25 percent below the annual ADT. The traffic counter near Ashton shows even greater seasonal variation with August traffic volumes being 111 percent higher than the average ADT and January volumes being 50 percent less than the ADT.

August traffic in the northern part of the corridor quadruples from its low point in January, a tremendous fluctuation in traffic. People in the area, particularly those who live in Ashton or on highway Segment 7 between Chester and the Ashton Hill bridge, are concerned about this increase in traffic. Access management, sidewalks, and bicycle lanes within the town of Ashton would improve the situation; however, the increase in traffic will remain and is forecast to grow over the next 20 years.

5.13 Transportation Modes

5.13.1 Air

In the US 20 corridor vicinity, four airports are currently available for use by the public. Idaho Falls Municipal Airport, is one of seven commercial airports in Idaho. Commercial airports on

**TRAFFIC IN THE
NORTHERN PART OF
THE CORRIDOR
QUADRUPLES FROM
ITS LOW POINT IN
JANUARY.**



the corridor have regularly scheduled air service and enplane over 10,000 passengers annually. The other three airports are located in Rigby, Rexburg, and St. Anthony. The airports in Rigby and St. Anthony are community-access airports that conform to state aviation standards. The airport in Rexburg is listed as a general aviation airport.

5.13.2 Rail

The rail system in the area surrounding US 20 from Idaho Falls to Ashton is comprised of the Union Pacific (UP) main line that originates in Pocatello and continues to Montana, and a number of former UP lines that are currently controlled by the Eastern Idaho Railroad (EIRR).

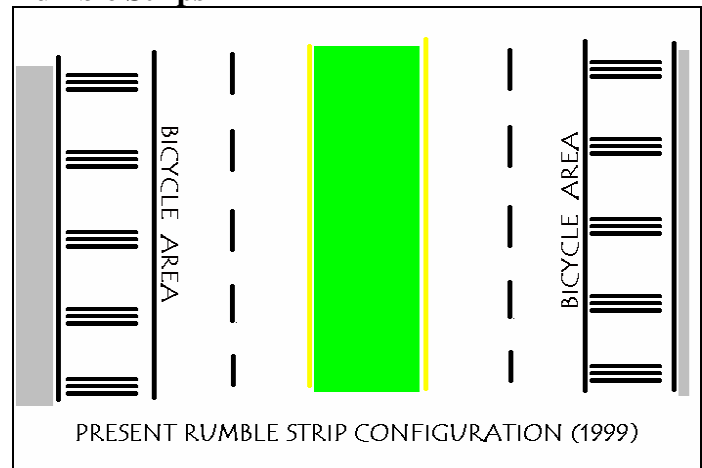
The Union Pacific line follows a route through Idaho Falls, then north along Interstate 15 to Montana. EIRR branches extend from the Idaho Falls area to Ashton, Menan, and Newdale. Rail cargo consists primarily of farm and food products with a small amount of inbound agricultural chemicals. According to the *Idaho Rail Plan*, just over a million tons of rail freight originate in Idaho's District 6, and just over 200,000 tons terminate there.

5.13.3 Bicycle and Pedestrian Facilities

With the exception of a fairly short length of corridor to the north of State Highway 33, and many bridges serving the corridor, shoulder width on US 20 is adequate to serve both bicycle and pedestrian needs. While the width is adequate, the construction standard used for shoulders in Idaho unintentionally discourages bicycle usage. In the interest of safety for drivers, the Idaho Transportation Department has incorporated rumble strips into their construction standards for shoulders. These rumble strips are located approximately 20 feet apart and span the entire width of the shoulder. The following figure illustrates this configuration.

Rumble strips along the shoulder have been shown to greatly reduce the number of single vehicle and rollover crashes; however, because of their placement across the full width of the shoulder, bicycle riders are forced out into the traffic stream for a smooth trip.

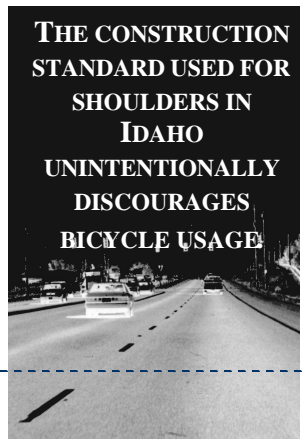
Present Configuration of US 20 Rumble Strips



5.13.4 Transit

The following inventory of existing public transportation modes along the US 20 corridor is based on information presented in the *Idaho Statewide Public Transportation Needs and Benefits Study* and the *Movin' Idaho Public Transportation Plan*, as well as telephone interviews.

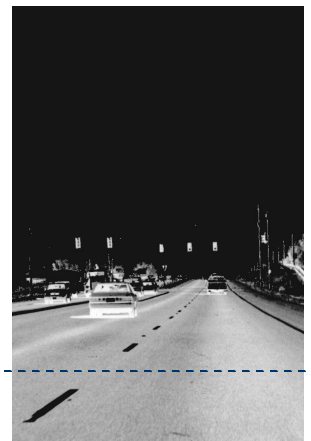
- Ashton Seniors – demand-response service for seniors in Ashton.
- C.A.R.T., Inc. (Community and Rural Transportation) – deviated fixed route service in Idaho Falls, Rigby, Rexburg, St. Anthony, and Ashton; demand-response service for the general public within a 12-mile radius of Idaho Falls and the southern portion of Fremont County; and intercity service for the general public from Ashton to Idaho Falls with stops in St. Anthony, Rexburg, and Rigby.



- Eastern Idaho Special Services Agency – organized volunteer service for seniors in an area bounded by Rexburg, Ririe, Ammon, Idaho Falls, and Lewisville. The service is also available in the individual towns of Ashton and St. Anthony.
- Greyhound – Intercity service for the general public from Montana to Utah with stops in Ashton, St. Anthony, Rexburg, Rigby, and Idaho Falls.
- South Fremont Senior Center – demand-response service for seniors in St. Anthony.
- Tri-City Transportation – demand-response service for seniors in Rigby, Ririe, and Roberts.
- Salt Lake City Transporter-Public service from Rexburg, Idaho Falls, etc.

Organizations providing services that do not meet the definition of public transportation include medical establishments such as Idaho Falls Care Center, Good Samaritan Center, and Ashton Nursing Home. The Department of Health and Welfare provides rides with State-owned vehicles through its regional office, and, with the help of Vocational Rehabilitation, they fund transportation services through the reimbursement of client-provided trips. Other organizations include private providers such as Holliday Motor Coach, which provides charter service, and Easy Way Taxi and Delivery.

The Idaho National Engineering and Environmental Laboratory (INEEL) provides subsidized bus rides to its employees from Ashton along the US 20 corridor, through Idaho Falls, and to the INEEL Site on the Arco desert.



6.0 ENVIRONMENTAL AND LAND USE CHARACTERISTICS

An overview of external activities and land uses that have a direct impact on the corridor and its operations will be followed in this section by a discussion of current land use along the corridor area as well as a discussion of current and forecast employment on the corridor. The analysis for the corridor reflects the use of employment as a surrogate for forecasting actual land uses. Aerial photos were used to determine approximate acreages of current land uses, and a forecast based upon available land was then developed. This methodology assumes that land uses will remain relatively constant and will not experience radical change over the 20-year period covered in the plan.

One exception is the Thornton area. The development of Bear World is likely to create spin-off development. When the land use inventory was developed, Bear World was not yet under construction. The employment forecast has been adjusted in this area to reflect an expected influx of commercial and tourist development and activities.

Community profiles have been developed for each section of the corridor and are included in this part of the study. Detailed environmental, historical, and cultural resources present in the corridor vicinity are also included, as well as a discussion of key environmental issues.

6.1 External Features and Land Uses that Impact the US 20 Corridor

The US 20 corridor is a gateway to many recreational activities in the region that greatly influence the amount of traffic on the corridor, particularly in the summer months. This highway provides access to Yellowstone and Teton National Parks; Jackson Hole,

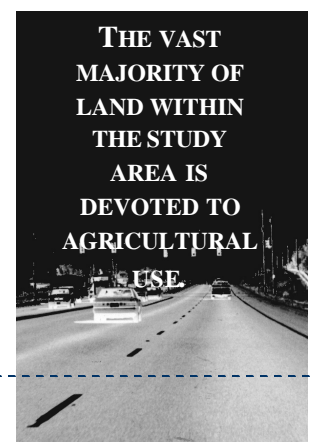
Wyoming; cabins and camping facilities in Island Park; and countless sportsman accesses for fishing and hunting, as well as a growing tourist-based commercial business sector.

An estimated 39 percent of all people travelling to Yellowstone National Park use the west entrance to the park. Approximately 65 percent of this traffic travels on US 20 to reach the west entrance (interview with Pat McGowan, Western Transportation Institute). Travel to this park can impact US 20 by a thousand trips per day during peak season tourist travel.

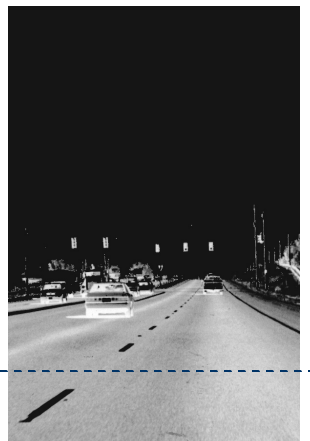
As evidenced by information obtained from ITD permanent traffic counters, this corridor can experience a significant increase in traffic during the peak summer tourist season, typically in the month of August. Based on an examination of the current land uses found within the corridor, this situation is not likely to change. The location of the corridor as well as current and growing land uses will influence continued growth in traffic.

6.2 Current Land Uses

The following maps show the current land use on the US 20 corridor. Most land within the study area is devoted to agricultural use. Several comprehensive plans reviewed gave priority to the preservation of prime agricultural lands. In spite of this stated policy priority, the corridor seems to be developing unabated. The land within the immediate vicinity of the highway is slowly changing character, with more residential and commercial-based land uses.



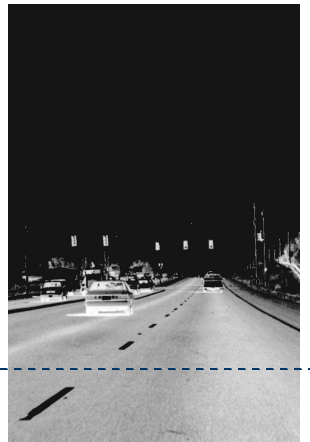
Segment 1 Map



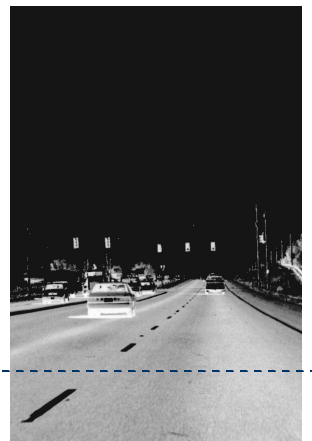
Segment 2 Map



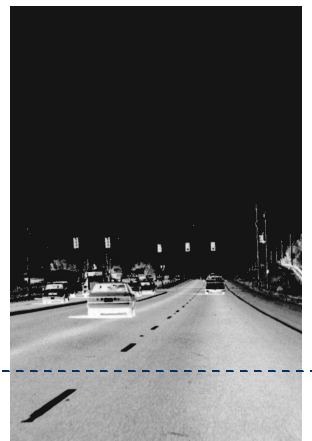
Segment 3 Map



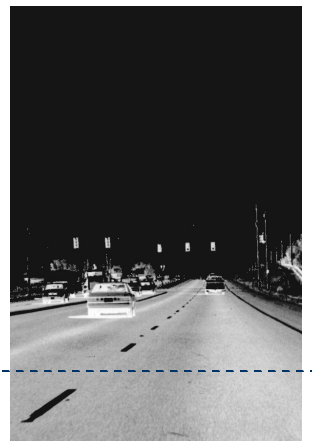
Segment 4 Map



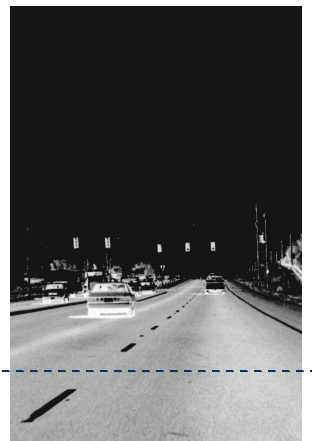
Segment 5 Map



Segment 6 Map



Segment 7 Map



While present land uses suggest that urban activity is present in portions of the study area, the corridor is far from urbanized. The vast majority of land found within the corridor boundaries is agricultural, and there is little evidence suggesting that primary land use will change, or even be challenged, within the 20-year scope of this plan. However, that does not mean that the corridor will not see growth in employment and intensification of local land uses. On the contrary, the employment and development of the corridor is forecast to continue, and land uses around access points are predicted to intensify.

6.3 Planned Land Uses

To develop the land use inventory, a windshield survey of the area was taken, and aerial photographs of the area were reviewed to determine all substantial current land uses. Predicting future land use is much less precise.

Interviews were held with all planning officials that have responsibility over zoning within their jurisdiction. Interviews also were held with corridor stakeholders that might have a development interest in the corridor. Finally interviews were conducted with economic development agencies to determine whether there is or might be substantial interest from large-scale employers or other land developers in developing land within the corridor boundaries. Interviews yielded very little new or unexpected information about potential new employers coming into the area.

Since little large-scale land use activity is happening or is forecast for the study area, it was assumed that development would continue at a relatively even progression. As the corridor is improved, it is likely that areas

that have access to the roadway will develop first. It is also logical to assume that those accesses close by urban areas will develop before accesses that serve more rural lands.

To better analyze the progression of land use and traffic impacts, the corridor was further segmented into 19 traffic analysis zones (TAZs). The TAZ format allows a look at smaller pieces of the corridor to better assess and forecast impacts to traffic and capacity for the corridor and its accesses.

Because the assumption was made that the newly developing land uses on the corridor would be essentially “more of the same” (i.e. convenience store/service station, agriculturally based industrial, and tourist-oriented commercial) employment per zone has been used as a surrogate for actual land use.

Estimates of population and employment were developed for 1997 as a base year, and forecasts were made in five-year increments. Table 10 shows the 1997 population and employment estimates by TAZ and their associated 2020 forecast. This table shows that the population growth and employment gains will concentrate around the urban areas on the corridor, but most areas of the corridor are forecast to experience growth. The methodology used and assumptions made in the demographic forecast are presented in detail in the appendix. The following maps illustrate planned land uses within the corridor study area and depict population and employment by traffic analysis zones. The first two maps show 19 zones for the year 1997, and the next two show the same zones forecast for the year 2020.

**IT WAS ASSUMED
THAT
DEVELOPMENT
WOULD CONTINUE
AT A RELATIVELY
EVEN
PROGRESSION.**

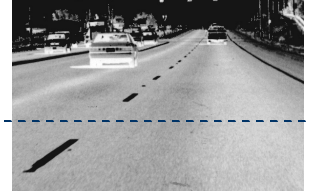


Table 10: Population and Employment Estimates and Forecast by TAZ

Segment #	Zone #	Zone Description	1997 Population	2020 Population	1997 Employment	2020 Employment
1	1	Idaho Falls	2,769	4,981	7,491	13,814
	2	Idaho Falls urban boundary to North of St. Leon	97	125	135	229
	3	North of St. Leon to South of Ucon	300	420	19	20
2	4	Ucon to Bonneville County Line	1,070	1,952	392	838
	5	Bonneville County Line to North of Rigby	3,920	5,027	1,527	2,471
3	6	North of Rigby to North of Ellis Rd.	100	120	25	30
	7	North of Ellis Rd. to the Snake River	400	600	45	57
	8	Snake River to North of Thornton	750	900	75	395
	9	North of Thornton to South of Rexburg(including S. Rexburg IC)	192	315	300	938
4	10	South of Rexburg to North of Central Rexburg IC	14,300	19,894	8,402	10,500
	11	North of Central Rexburg IC to South of Highway 33	1,620	2,186	500	2,500
5	12	South of Highway 33 to South of ITD Maintenance Shed	131	156	0	0
	13	South of ITD Maintenance Shed to North of Egin Road	521	643	143	242
	14	North of Egin Road to North of St. Anthony City Limits	3,160	3,360	478	678
6	15	North of St. Anthony City Limits to North of St. Anthony Business Loop	200	224	5	5
	16	North of St. Anthony Business Loop to North of Golf Course Road	121	130	0	0
	17	North of Golf Course Road to Chester	200	214	20	20



7	18	Chester to South Ashton City Limits	361	376	65	90
	19	South Ashton City Limits to South Side of Ashton Hill Bridge	1,355	1,755	220	329



Insert traffic analysis zone – north



Insert Traffic Analysis Zone Map

insert traffic analysis zone map



insert traffic analysis zone map

7.0 ENVIRONMENTAL SCAN

The environmental scan is critically important to understanding the impacts of future corridor development on both the built and the natural environment. The scan is vital whether the impacted resources are natural, biological, threatened and endangered species, or wetland habitat. The environmental scan will identify those areas and specify where mitigations may be necessary if improvements to the corridor are proposed within these areas. The environmental scan for this corridor did not produce any fatal flaws that might exist within the corridor that would preclude suggested improvements within a given area. On the whole, the environmental issues in and around the corridor are fairly minimal, and future improvements should have minimal impacts on environmental resources.

7.1 Methods

The environmental scan was conducted following guidelines established in the Idaho Transportation Department's (ITD) *Draft Corridor Planning Guidebook* (January 1998). The first portion of the environmental scan included mapping environmental resources, preparing a list of environmental issues within the corridor, and identification of those areas expected to require further analysis for *National Environmental Policy Act* (NEPA) purposes.

The environmental categories for which data were collected consist of:

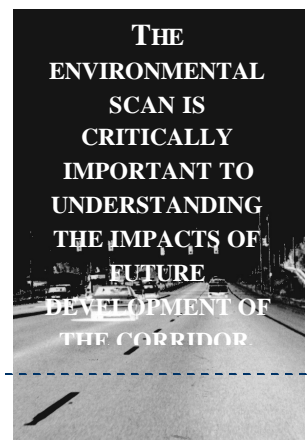
- Floodways/100-year floodplain
- Rivers and lakes
- State or national forest system lands
- Wildlife reserves
- Wetlands boundaries

- Critical fish and wildlife habitat
- Threatened and endangered species locations
- No-spray pesticide/herbicide areas
- Areas of concern for brush clearing
- Archaeological sites
- Historical buildings, sites, or districts

A variety of sources were checked for each category of information to determine whether areas of concern existed within the Highway 20 corridor. For purposes of the scan, the width of the corridor was considered to be 0.5 mile on either side of the existing highway route. In some cases, resource locations immediately outside the route were noted to provide additional contextual information.

In most cases, resource locations were drawn by hand on USGS 7.5" maps using color and numerical codes keyed to a table describing the resource. The exceptions to this method of mapping are wetland locations. US Fish & Wildlife Service (USFWS), National Wetlands Inventory (NWI), and Geographic Information System (GIS) coverage will be provided for the highway corridor.

Because some segments of Highway 20 have changed since the most recent USGS maps were issued in 1979 and 1980, the corridor route was verified using aerial photographs taken in October of 1996 and provided by ITD. The current alignment of the highway was drawn on the USGS maps.



7.2 Environmental Scan Results

A scan of existing biological, cultural, and floodway data along the Highway 20 corridor identified previously recorded biological occurrences, cultural sites, and flood-prone areas. All are identified on the maps accompanying this report. This section of the corridor study summarizes the available data for each environmental category. A list of data sources consulted is included in the report. The list provides explanatory information from the sources contacted and identifies environmental categories where no concerns or resources are indicated within the highway corridor.

7.2.1 Biological

A search for areas of biological concern in or near the Highway 20 corridor was conducted through a review of databases maintained by, and consultation with representatives of, the USFWS, the Bureau of Land Management (BLM), the Idaho Department of Fish and Game (IDFG), the Intermountain Herpetological Database, the Department of Environmental Quality (DEQ), ITD, and county weed control offices.

Wetlands. USFWS NWI maps for the Highway 20 corridor indicate wetlands adjacent to Highway 20 in a number of locations in the Ashton, Falls River, Henry's Fork, Teton River, Willow Creek, and Snake River areas. Wetlands have been defined by government agencies and researchers using many different criteria and standards. Most definitions recognize the interaction of hydrology, soils, and vegetation in creating physical and biological characteristics unique to wetlands. The NWI maps, developed by the USFWS, use a hierarchical scheme incorporating topography, substrate, water regime, and vegetation. Under this system, for example, riverine wetlands comprise all habitats within a river channel except

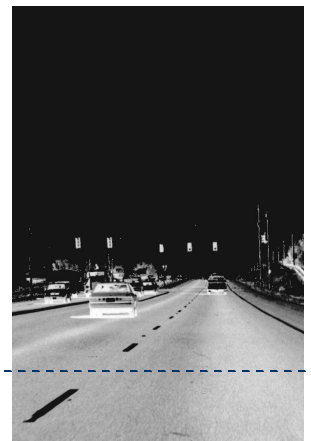
wetlands dominated by trees, shrubs, or persistent emergents. Palustrine wetlands consist of non-tidal wetlands dominated by trees, shrubs, or persistent emergents. Within the palustrine system are subsystems such as emergent, scrub-shrub, aquatic bed, and open water. Emergents have hydrophytic vegetation that is erect, rooted, herbaceous, and is present during most of the growing season. Scrub-shrub is dominated by woody vegetation less than 20 feet tall.

Most of the wetlands within the highway corridor are classified as palustrine emergent or palustrine open water, with some palustrine scrub-shrub and aquatic bed occurrences. Because of extensive agricultural and other human development in the area from Idaho Falls to Ashton, IDFG considers the Highway 20 corridor generally non-crucial from a regional biological resource perspective (personal communication, Marsh 1998). However, all riparian and wetland areas within the corridor are considered to be important habitat by IDFG. A few areas are of increased local concern or importance because of their relationship to broader areas of the ecosystem or proximity to crucial habitat. IDFG describes no areas as critical.

Wildlife Reserves. No wildlife reserves are indicated within the Highway 20 study corridor on BLM 1:100,000 Land Status maps (Ashton and Rexburg).

State/National Forests. No state parks or national forests are indicated within the corridor on BLM 1:100,000 Land Status maps (Ashton and Rexburg).

Critical Fish/Wildlife Habitat. Two notable wetland habitat sites are described near the corridor in the St. Anthony and Ashton



areas (Jankovsky-Jones 1996). The Henry's Fork region below St. Anthony includes a high quality cottonwood community. Moose are present, and leopard frogs are abundant. The Highway 20 corridor passes through this area for about two miles immediately south of St. Anthony. The area has high recreational value for fishing and picnicking. Ashton Marsh, one mile west of Ashton, contains important waterfowl and songbird habitat. Conservation easements have been established on part of the site.

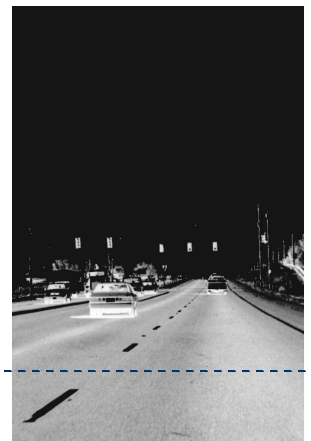
The South Fork of the Snake River is considered by the USFWS to be one of Idaho's most unique riparian ecosystems, containing important fish and wildlife habitat. It contains the largest continuous cottonwood ecosystem in the state. The Highway 20 corridor crosses this ecosystem in the Lorenzo area. BLM records identify one osprey nest within the corridor at Lorenzo Bridge, crossing the South Fork of the Snake River, and one nest about 300 meters downstream from the corridor. Significant bald eagle nesting habitat is also found on BLM land downriver (personal communication, Gardetto 1998).

Threatened and Endangered Species; Rare Species. IDFG lists tracked species, which include Federal or State Listed Threatened or Endangered species, as well as Species of Concern or Watched species. Listed Endangered species are in danger of extinction throughout all or a significant portion of their range. Listed Threatened species are likely to be classified as Endangered within the foreseeable future. Species of Concern have documented negative population trends or declining habitat. Watched species are stable but are on the periphery of the range, or have unique habitat, or are poorly understood. Species that occur along the Highway 20 study corridor include:

- Trumpeter swan nesting territory is reported at Ashton Marsh west of the study corridor. Species status: Federal Species of Concern; State Species of Concern.
- Bald eagle nesting territory occurs in the St. Anthony area. The region from the Henry's Fork confluence to St. Anthony, and St. Anthony to Island Park, contains important bald eagle habitat. Nests are recorded at locations throughout the area, although generally outside the immediate study corridor. Species status: Federal Listed Threatened; State Endangered.
- Great grey owls have been recorded wintering in the Chester vicinity, in cultivated fields with narrow riparian corridors. Species status: Federal Watched; State Species of Concern.
- Osprey nests were recorded in BLM records in the vicinity of Lorenzo Bridge.
- A common grackle colonial breeding area is found in the vicinity of St. Anthony. Species Status: State Protected Non-game Species.
- Leopard frogs are abundant along Henry's Fork downstream from St. Anthony for two miles. Species status: BLM Sensitive Species (rapidly declining numbers, under status review by USFWS, unique habitats, or small, widely dispersed populations); State and USFWS Species of Concern.

No critical amphibian locations were identified in a search of the Intermountain Herpetological Database for amphibian and reptile records. However, locality descriptions were often non-specific.

Significant plants include Green Muhly (State S1 - critically imperiled), recorded near St. Anthony; and Ute Ladies' Tresses (Federal Listed Threatened, State



S1 - critically imperiled) recorded at Lorenzo Levee 1.3 miles west of Highway 20 in floodplain habitat.

Pesticide/Herbicide No-Spray Areas. Spray policies vary from county to county within the Highway 20 study corridor. Bonneville County does not identify no-spray areas as such. The county sprays all noxious weeds, using different chemicals in wetland areas. Fremont County spray policy avoids seed farms and areas with sensitive crops. Canal crossings and the Falls River area are watched closely, and sensitive locations are selectively hand sprayed. Jefferson County has no county restrictions. Selected no-spray locations are based on adjacent agriculture and the discretion of field crews. Madison County does not identify no-spray areas.

The BLM does not have spray restrictions on the small portion of BLM land (north of Lorenzo and northeast of St. Anthony) in the study corridor.

Areas of Concern for Brush Clearing. The IDFG and BLM do not place restrictions on brush clearing for habitat protection (personal communication, Marsh; Gardetto 1998). County offices also indicate no restriction. The counties generally clear brush at intersections to enhance visibility.

7.2.2 Cultural

A search for recorded cultural resources in or near the highway corridor was conducted using records of the Idaho State Historic Preservation Office (SHPO), Boise, Idaho (archaeological sites and historic buildings); the BLM, Boise, Idaho (historic General Land Office [GLO] maps); and the National Register of Historic Places (NRHP). There are no National Register-listed sites within the Highway 20 corridor.

The records search identified one historical archaeological site and seven historic

buildings or structures within or near the Highway 20 corridor. Four of the historic buildings are considered eligible for the NRHP; three buildings and the archaeological site are considered not eligible. No prehistoric sites have been recorded within or near the corridor. According to the ITD state archaeologist, the SHPO records are current, and there are no areas of special concern for cultural resources along the Highway 20 study corridor (personal communication, Gaston 1998).

Site 10FM248. The Ashton Ranger Station was recommended as not eligible for the NRHP in 1984 because remodeling had impacted site integrity. It consists of a historic former ranger station, including bunkhouse, warehouse, and outbuildings dating to 1934-1937. The site is located at the intersection of 7th and Pine Streets in Ashton, east of the Highway 20 corridor.

Site 10FM249. The Ashton Ranger Station Dwelling was recommended as not eligible for the NRHP in 1984 due to loss of integrity of location and design. It consists of an employee residence constructed in 1952 by moving two other buildings. The site is at the intersection of Highland and 5th Streets in Ashton, east of the Highway 20 corridor.

Site IHSI 43-16027. The Jack Jessen Granary was recommended eligible for the NRHP under criterion C in 1993 as representative of old-style stacked plank construction. It consists of a historic house and associated outbuildings including granaries, sheds, and outhouses dating to ca. 1910. The site is located at the intersection of a county road and Highway 20 south of Ashton, adjacent to Highway 20.

**THE IDFG AND
BLM DO NOT
PLACE
RESTRICTIONS ON
BRUSH CLEARING
FOR HABITAT
PROTECTION.**



Site IHSI 43-16053. This site consists of an agricultural cellar of stucco and wood recorded in 1995 in a study of potato cellars of Idaho and identified as having historical significance as part of a multiple property study. However, it was planned for demolition so a nearby store would be more visible to motorists passing on Highway 20. The site is located at Highway 20 and 800 North across from the Fall River Trading Post, Chester, Idaho.

Site NPS 005790. This site is a vehicular bridge across Henry's Fork that was built in 1907. It is the earliest steel bridge remaining in the Idaho highway system. The National Park Service recorded it in 1982. National Register eligibility is not noted on the site form; however this site is likely to be considered eligible for the NRHP under criterion C as the earliest bridge of its kind in the Idaho highway system. It is located in Fremont County, about 0.5 mile north of Highway 20 on Henry's Fork.

Site NPS 004922. This site is a bridge across the Snake River constructed in 1915 on the Yellowstone Branch of the Oregon Short Line Railroad. The National Park Service recorded it in 1982. National Register eligibility is not noted on the site form. Highway 20 crosses the bridge south of Thornton, Idaho.

Site ISHS 015691. The Cordon Apartments consist of two apartment units and two outbuildings constructed in 1950. Evaluation in 1989 indicated that the buildings were deteriorated and not historically or archaeologically significant and were determined not eligible for the NRHP. The site is located southeast of the Jefferson County Fairgrounds and west of Highway 20.

Site 10BV177. This site is an earthen irrigation canal along the South Fork of Willow Creek in Bonneville County. The canal, owned by the Progressive Irrigation

District, is of unknown age and is considered not eligible for the NRHP because of its poor condition and lack of documented history. It is located east of Highway 20 at Telford and St. Leon Roads.

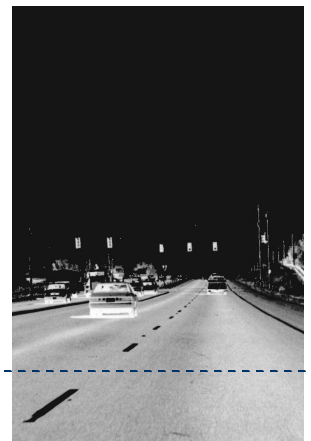
In addition to recorded sites, GLO maps dating to 1891 show the Thornton area as the junction of several historic roads. Although no sites have been recorded in this area, the location may be sensitive for the presence of historic resources.

7.2.3 Waterways and Floodways

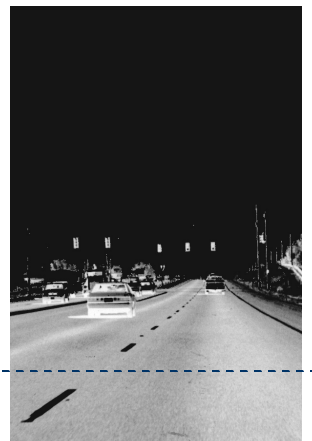
Rivers, lakes, and creeks are identified on the USGS 7.5" maps of the corridor study route. According to the National Park Service list of rivers on the National Wild and Scenic Rivers System (16 USC. 1274), none are located within or near the Highway 20 corridor.

National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM) held by the Idaho Department of Water Resources were reviewed to determine whether the highway corridor includes portions of the base (100-year) floodplain. NFIP maps identified ten 100-year floodplain zones within the corridor.

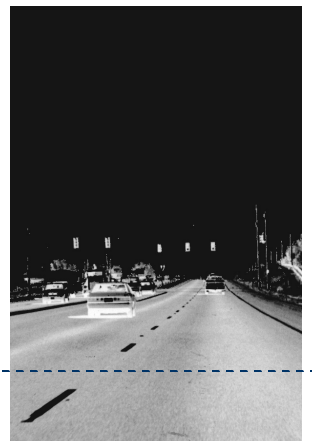
USGS maps of flood-prone areas, developed as part of the national program for managing flood losses in urban areas (as mandated by the *National Flood Insurance Act of 1968*), were also reviewed for the Highway 20 corridor. Twelve locations were noted where flood-prone areas coincide with the corridor. These maps do not distinguish between 100- and 500-year floodways.



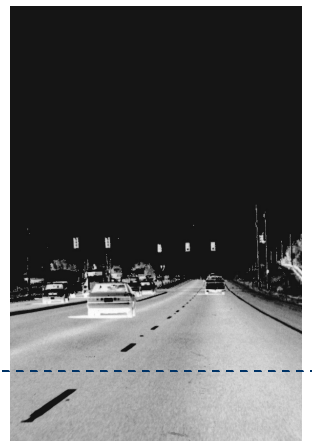
**INSERT MAPS WITH ONLY WATER
INFORMATION ON THEM. (I.E.
FLOODWAYS, WETLANDS, RIVERS,
ETC.)**



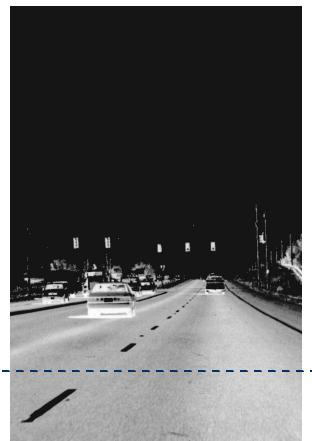
Insert map #2 with h20



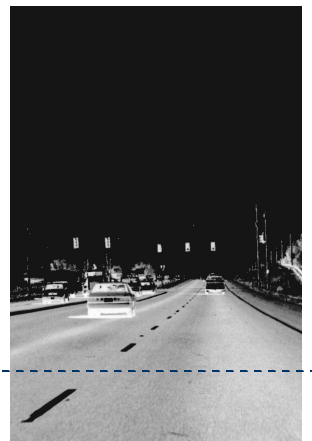
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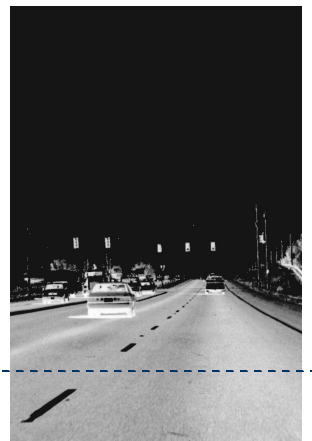
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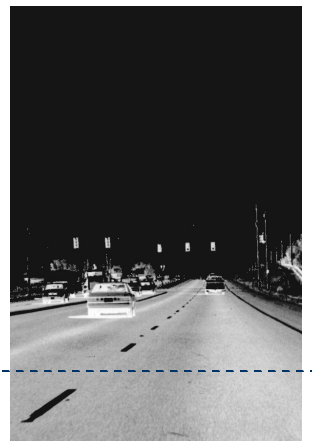
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7.3 Environmental Scan Summary and Conclusion

A scan of biological, cultural, and floodway data for the Highway 20 corridor identified a number of potentially sensitive locations.

7.3.1 Wetlands

Wetland areas are indicated adjacent to Highway 20 in the Ashton, Falls River, Henry's Fork, Teton River, Willow Creek, and Snake River areas. The majority of the wetlands within the highway corridor are palustrine emergent or palustrine open water, with some palustrine scrub-shrub and aquatic bed occurrences. In general, the IDFG considers all riparian and wetland areas within the corridor to be important habitat, although no areas have been described as critical habitat.

Wetlands that fall within the area of impact of a federally funded undertaking would require further analysis in compliance with Section 404 of the *Clean Water Act* (CWA), and *Executive Order (E.O.) 11990 Protection of Wetlands*.

7.3.2 Biological

The Highway 20 corridor crosses or passes near a number of areas of biological concern for the region:

- The South Fork of the Snake River (crossed by the Highway 20 corridor in the Lorenzo area) is considered by the USFWS to be Idaho's most unique riparian ecosystem and the most important fish and wildlife habitat in the state of Idaho, including important amphibian habitat. It contains the largest continuous cottonwood ecosystem in the state.
- Henry's Fork, extending below St. Anthony for about two miles, includes a high quality cottonwood community. Moose are present and leopard frogs are

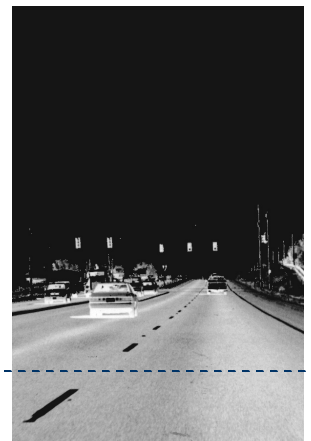
abundant. The area has high recreational value for fishing and picnicking.

- Threatened, Endangered, Species of Concern, Sensitive, or Watched species near or within the Highway 20 corridor include trumpeter swans at Ashton Marsh west of the study corridor; bald eagle nesting territory in the St. Anthony area and at other locations outside the highway corridor; a great grey owl wintering area in the Chester vicinity; osprey nests in the vicinity of Lorenzo bridge; a common grackle colonial breeding area in the vicinity of St. Anthony; and leopard frogs along Henry's Fork near St. Anthony.
- Sensitive plant species include Green Muhly recorded near St. Anthony; and Ute Ladies' Tresses recorded at Lorenzo Levee, west of Highway 20.

Potential future activities that could affect biological resources within the corridor include road widening, power line realignment, increased campground development, boat ramp construction, and increases in service-related industries. Further analysis of biological resources within the highway corridor would be required in compliance with the *Endangered Species Act* and 33 Code of Federal Regulations (CFR) 328.3(b). If the project uses publicly owned parks, recreation lands, or wildlife and waterfowl refuges adjacent to existing highways, a Section 4(f) *Department of Transportation* (DOT) Act evaluation may be required.

7.3.3 Cultural

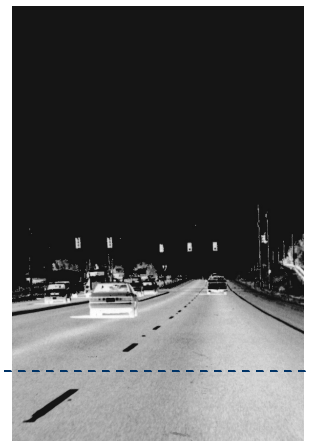
No cultural resources within the Highway 20 study corridor are listed on the NRHP. Four of the seven cultural resources presently documented within the Highway 20 study



corridor are considered eligible for the NRHP and would require evaluation if they fall within the area of impact of a federally funded undertaking. Those portions of the route not yet surveyed for cultural resources require archaeological survey prior to an undertaking in compliance with Section 106 of the *National Historic Preservation Act of 1966*, the *Department of Transportation Act of 1966*; the *Federal-aid Highway Act of 1968*; and NEPA. Improvements to stream crossings in the area requiring a Section 404 permit from the Army Corps of Engineers would also require compliance with the Section 106 process. Historic bridges or other historic sites that are likely to be affected may require Section 4(f) (DOT) evaluation.

7.3.4 Waterways/Floodways

According to the National Park Service list of designated Wild and Scenic Rivers, none are located within the Highway 20 corridor. NFIP maps identified ten 100-year flood zones within the corridor. Base (100-year) floodplains identified within Highway 20 study corridor would require further analysis in compliance with *E.O. 11988 Floodplain Management* (1977), which directs federally funded undertakings to determine whether a project will encroach upon a base floodplain and to take action to minimize floodplain impacts. Specific compliance actions, such as location hydraulic studies (23 CFR 650), are required if activities are planned within a defined 100-year floodplain.



8.0 ANALYSIS OF THE EXPECTED TRAVEL DEMAND AND PERFORMANCE OF THE EXISTING AND PROGRAMMED TRANSPORTATION SYSTEM IN 20 YEARS

8.1 Estimated Future Transportation Demand

8.1.1 Methodology

When developing a forecast methodology, several factors should be considered. One of the primary factors in developing a forecast is the type of data that is available for the analysis. In this particular case, available US 20 data included traffic counts from temporary counters, and turn movement counts at the 26 at-grade intersections. As discussed in the previous chapter, there were no significant land use issues within the corridor boundaries, and the historical traffic counts indicated a relatively stable upward growth in average daily traffic. In this case, trend use is an appropriate method to develop a forecast.

8.1.2 Growth Rates

The first step in forecasting traffic on US 20 was to compute a growth rate for the traffic on the corridor. As part of the data collection process, traffic counts at 45 different locations along the corridor were gathered from 1993 through 1998. These counts are estimated based on actual counts that are updated periodically. Using this information a five-year annual average growth rate was developed for each of the 45 corridor segments.

The annual average growth rates were then applied to the 1998 traffic counts to develop a two-year estimate to the year 2000. The 2000 forecast was then projected in five-year increments to the year 2020 to produce a 20-year traffic forecast for the corridor.

This forecast produced some anomalies that weren't consistent with a valid interpretation of the future. The model we had constructed was over-predicting traffic in some areas, and under-predicting traffic growth in others. Thus, adjustments needed to be made in the forecast methodology.

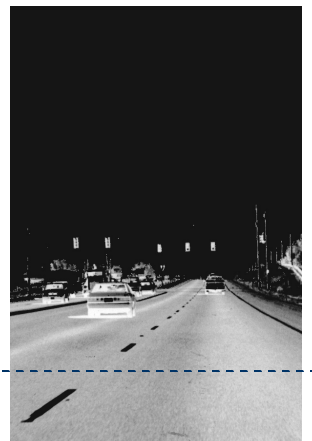
To smooth the forecast, the five-year annual average growth rate was itself averaged over the 45 individual segments to come up with an overall corridor growth rate. These calculations produced a corridor-wide growth rate of 2.21 percent growth in average daily traffic (ADT) on an annual basis. When this rate was applied to the corridor, it seemed to artificially constrain some of the ADT figures on the more urban segments of the corridor.

To adjust for this anomaly, a maximum increase of 3.25 percent was set, with 2.21 percent set as the minimum. A maximum of 3.25 percent was chosen for the following reasons. First, when applied to the urban area it produced results comparable to the Idaho Falls travel demand forecasting model. Also, it is about the highest growth rate that can be sustained over the long term. A few of the 45 corridor segments had five-year average annual growth rates that were between 8 and 11 percent. Such growth can happen over a short period, like five years, but when applied over the long term, it creates huge increases in predicted traffic volumes. A 3.25 percent growth rate produces forecast volumes that are high, yet believable, over a 20-year forecast period.

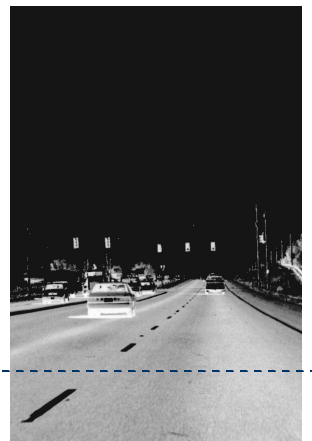
**THE FIRST STEP IN
FORECASTING
TRAFFIC ON US 20
WAS TO COMPUTE A
GROWTH RATE FOR
THE TRAFFIC ON
THE CORRIDOR.**



**INSERT MAP SHOWING 2020
FORECAST ADT.**



insert map 2 – future corridor



8.1.3 Forecast ADT

The previous map shows the forecast ADT for the US 20 corridor. The development of this analysis has shown two important facts impacting the corridor. First, growth in ADT is occurring within the urban portions of the corridor. State Highway 33 seems to act as a cutoff for traffic growth. The areas north of Highway 33 are growing at a far slower pace than the areas to the south of this intersection. This trend indicates continuing urbanization as a key to growth in the corridor traffic, independent of other factors like increased tourism.

Second, growth in ADT seems to be clustered around corridor access points in the southern half of the corridor. This heavier concentration of traffic is seen when looking at the 45 count station points, where growth in ADT is more pronounced around intersections. This growth in ADT leads us to the conclusion that the 27 at-grade access points are being used increasingly as the urbanization of the corridor progresses, substantiating the concern for safety at these access points.

8.2 Deficiency Findings for the Existing US 20 Transportation System

Our analysis to this point has led to several findings that the recommended alternative must address, supporting the project purpose and need statement.

8.2.1 Capacity

Two places on the corridor have capacity related findings. First, in the urban segment, existing and forecast levels of service, and volume-to-capacity ratios may indicate no problem. However, the configuration of the roadway (five interchanges within the first two miles of the four-lane segment) creates weaving conflicts that degrade the level of service. The refinement plan for this area has suggested a bypass of the area for US 20 that

would pull approximately 25 to 30 percent of the forecasted traffic away from this congested point. Such a bypass would also preserve the operations of the urban part of the corridor to present levels. A solution for the portion of the corridor within Idaho Falls is needed, but there is no easy or inexpensive way to resolve these issues.

The other place on the corridor with a capacity related finding is the City of Ashton. This area can experience a four-fold increase in traffic during the months of July and August. The infrastructure serving these traffic levels, however, is inadequate to meet the demands being placed on the highway. Presently there are no channelized access points, sidewalks, curb, or gutter. These urban type improvements and associated lane delineation modifications are needed to better manage peak period traffic through this otherwise rural community.

8.2.2 Safety

As traffic on US 20 has continued to increase, the corridor has experienced more safety problems. Accident rates for the corridor, and the severity of those accidents, are higher than normal for a rural highway such as this one. The approach taken by the Idaho Transportation Department, presented in the recommended alternative, is intended to vastly improve safety on the corridor by managing the accesses on the corridor in a much safer manner.

8.2.3 Alternative Modes

US 20 is well served by public transportation, through the service of Community and Rural Transportation (CART) of Idaho Falls. Pedestrians are well served by adequate shoulders throughout most of the corridor.

**AS TRAFFIC ON THE
CORRIDOR
CONTINUES TO
INCREASE, THE
CORRIDOR HAS
EXPERIENCED
GROWING SAFETY
PROBLEMS.**



However, two issues need resolution concerning alternative modes for US 20. First, even though the corridor serves pedestrians well, it acts as a barrier in some places to pedestrians wanting to cross the corridor. US 20 is a four-lane highway facility, and in urban areas like Rigby, the highway is separated directionally by four-foot high Jersey Rail barricade. This barricade makes crossing the corridor very difficult for pedestrians. In the stakeholder workshop this barrier was brought up as a concern, because school aged children were attempting to cross the corridor on foot.

The second finding concerns the ability of cyclists to effectively use the corridor. This corridor is noted as “most suitable” for cyclists in the Idaho Bicycling Guide, but the configuration of rumble strips on the shoulder of the road forces cyclists into the travel lane to reach their destination. The shoulder-wide rumble strips greatly deter cyclists wanting to use US 20 to gain access to the surrounding amenities and the vast network of cycling facilities in the Teton National Forest and the region.

8.2.4 Location of Deficiencies/ Improvement Needs

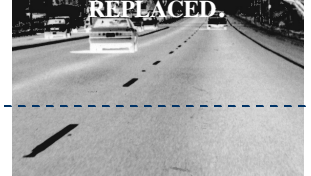
Improvement needs are found throughout the corridor. The recommended alternative focuses on the 26 at-grade intersections found on the corridor between Idaho Falls and Chester, and suggests changes to every one to improve corridor safety. The recommended alternative also discusses improvements to Segment 7 between Chester and the Ashton Hill Bridge by adding turn bays at road intersections where appropriate and constructing four miles of passing lanes.

There are several miles of shoulder improvement needs on US 20. The locations are approximately between Wilford Road and the South St. Anthony access, and in several

areas between the St. Anthony Business Loop and Golf Course Road. The shoulders in these areas fluctuate between two and four feet in width. The corridor should have a minimum six-foot width for the right-hand shoulder.

By Idaho bridge sufficiency standards, no bridges on the corridor currently need to be replaced. Three bridges should be programmed for rehabilitation. In the urban area two bridges have sufficiency ratings in the 70's. These bridges, while meeting the standards for rehabilitation, are just over the standard and are not critical needs at this time. The Curr Canal Bridge at MP 353.691 has a sufficiency rating of 66.3, a point at which programming activities for rehabilitation of the bridge should begin.

**BY IDAHO BRIDGE
SUFFICIENCY
STANDARDS THERE
ARE NO BRIDGES ON
THE CORRIDOR
THAT CURRENTLY
NEED TO BE
REPLACED.**



9.0 SUMMARY OF THE PUBLIC PROCESS AND CRITERIA USED TO GENERATE AND SCREEN ALTERNATIVES

At the beginning of the planning process for US 20, a work plan and public involvement plan were developed to guide the study process. The public involvement plan included three separate open houses along the corridor, three mail-back response forms, one brochure, production of table tents for area cafes, flyers announcing upcoming meetings, newspaper and radio advertisements, two newsletters, a stakeholder workshop, four advisory team meetings, and a media blitz.

There are many ways to measure the effectiveness of this project's public involvement process. Ultimately none of them matter unless the public accepts the recommended alternative. This planning process and its recommended alternative have gained that acceptance as a result of careful listening and adherence to the purpose and need statement.

Measures of effectiveness for the public process for the US 20 Corridor Plan will include attendance at open houses, productivity of the Stakeholder Workshop, number of comments received at open houses and through the mail, and, ultimately, the extent to which the product reflects the input of the public.

From the onset of this project, the staff of the Idaho Transportation Department has committed to a collaborative process in which ITD works in partnership with the public and corridor stakeholders. As in any good partnership, flexibility and openness need to exist between partners. It was this spirit of give and take that ultimately produced the recommended alternative.

9.1 Attendance at Open Houses

One of the biggest problems that public involvement processes face is persuading people to attend the meetings. All three rounds of public open houses had outstanding attendance. There are several reasons for the high turnouts. First, many people could identify with the topic, living or working on the US 20 corridor and depending on the road for mobility. Secondly, each meeting was preceded by an ad campaign, which included newspaper ads, radio spots, public access television, and flyers that were distributed to stores and businesses on the corridor.

Finally, the creation of the advisory committee brought together staff and elected officials from affected areas to be involved in the decision making for the corridor. An integral part of their role was to act as the eyes and ears within their communities and give the planning team information. They also were expected to spread information within their communities about the planning process and upcoming public meetings.

All these avenues ensured good attendance at the eleven open house meetings held at various locations on the corridor during three separate rounds of public meetings. During the first round, approximately 60 people attended over three evening open houses, even though the first meeting had low attendance due to severe weather conditions. The following two nights had far better attendance. These meetings set the tone for the public involvement effort. This first round of meetings made it apparent that the ITD was interested in working collaboratively with the public and stakeholders, which could account for improved attendance at subsequent open houses.

**ITD HAS
COMMITTED
THEMSELVES TO A
COLLABORATIVE
PROCESS IN
PARTNERSHIP WITH
THE PUBLIC AND
CORRIDOR
STAKEHOLDERS.**

The second round of public meetings involved the introduction of initial alternatives for the corridor. Approximately 200 people turned out for these meetings. An additional meeting was held in Ashton as a result of boundary expansion.

The main agenda for the final round of open houses was designed to take input on the recommended alternative for US 20. This meeting occurred after a newsletter and survey were distributed describing the four alternatives for each corridor segment. Survey responses and other public input were considered in selecting the recommended alternative. Approximately 160 people attended these meetings.

9.2 Comments Received

In total, this project has received over 1,000 individual comments. Some were transcribed from open houses, and others were received in written form. Many were collected from the questionnaires that were distributed. Still others were submitted based upon letter-writing campaigns, typically in response to a proposed intersection treatment. One reason for this success might be that on every newsletter or brochure the addresses of both the ITD and the consultant team project manager were published, as well as a comment form allowing people to write to the project team and ensure that their issues were addressed.

9.3 Stakeholder Workshop

In September of 1998, ITD invited stakeholders from around the corridor region to attend a four-hour workshop designed to use the known issues as a basis for structuring goals and objectives in the corridor plan. Approximately 30 stakeholders attended, including state representatives, business owners, local elected officials, federal and

state transportation officials, and local city and county staff.

The process began by giving everyone an update on the findings, with emphasis on traffic counts and forecasts. Next, all were asked to write down their most important issue for the plan to consider. Participants were then asked to put aside personal goals for the corridor plan and focus on their particular part of the corridor for a couple of exercises.

Participants were broken into three groups—a northern corridor, central corridor, and southern corridor group. Each group had a moderator and a recorder. The participants were told that the purpose of the exercise was to answer the question, “What will we need and expect from the transportation system in the US 20 corridor over the next 20 years?”

The first task was to list all corridor user groups. Each group then reviewed the issues identified for their segments of the corridor and added to the list if necessary. Each moderator then worked with the group to distill the essence of the issues and combine similar concerns. A priority exercise followed to determine the most critical issues for each corridor segment. Each group was asked what features they would like to see in the corridor over the 20-year period of the plan. Each group then compared the priority and feature list with the user group list to fill any holes in features and issues.

The project consultants used the information from the stakeholder workshop by to develop goals and objectives which were further defined by the management team. These goals and objectives were used to create the project purpose and need statement. This process

**IN TOTAL, THIS
PROJECT HAS
RECEIVED OVER
ONE THOUSAND
INDIVIDUAL
COMMENTS.**



worked very well, and information generated from stakeholder interaction went directly into the plan as a result of the workshop.

9.4 Public Input and Plan Development

Attendance, numbers of comments, and workshop output are relatively meaningless unless the plan reflects the concerns and ideas expressed as a part of the public process. The development of the US 20 corridor plan has from its onset been collaborative in every sense. One way to assess the extent of this cooperation is to look at the progression of the project based upon input received.

At the first round of open houses the corridor was defined as US 20 from I-15 in Idaho Falls to Chester, where the road narrows to a two-lane facility. Input received from people in attendance led to the expansion of the corridor study from the western edge of Idaho Falls where US 20 enters the metropolitan area to the Ashton Hill Bridge, approximately two miles north of Ashton. The thought was that the issues necessitating change to the corridor are felt further out than just the four-lane section. By expanding the corridor boundaries, the full range of issues in the more populated part of the corridor would be addressed.

At the second round of public open houses we introduced some preliminary alternatives for improvement of the 26 at-grade intersections. The preliminary alternatives were based on corridor goals and objectives, the purpose and need statement, and current programming of projects for the US 20 corridor within the study area. This round of open houses produced two additional alternatives for consideration.

Newsletter number three detailed all four alternatives per section and asked people to select their favored alternatives. Based on these responses and input received throughout

the planning process, the recommended alternative was chosen by the management team. This alternative was presented to the public in May of 1999, and ITD asked for final input. Based on this final round of input an interchange was moved from the St. Anthony Business Loop to the South St. Anthony intersection, a planned overpass was changed to a closure, and another interchange was proposed and programmed for St. Leon road in Segment 1.

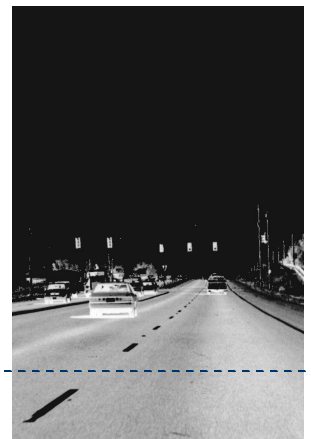
The US 20 planning process has a history of being highly collaborative in nature and responsive to the public and corridor stakeholders, while achieving the needs of the State of Idaho to improve safety and implement the project purpose and need statement.

9.5 Screening Criteria

After the development of the project purpose and need statement the management team developed the criteria to be used in screening the alternatives. Criteria chosen were:

- cost
- safety improvement
- land use consistency
- environmental impacts
- efficiency improvements.

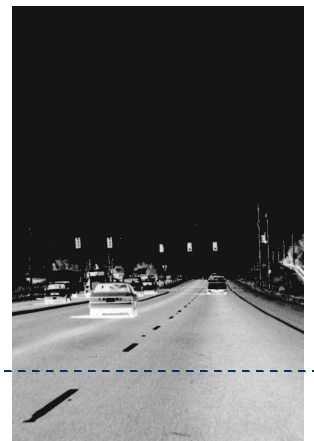
Each alternative was assessed by section using these criteria. Alternatives were ranked as high, medium, or low by segment, according to how the alternative impacted the criteria. Each segment was then aggregated by alternative to come up with the following matrix.



criteria matrix

	Do-Nothing	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Cost					
Safety Improvement					
Land Use Consistency					
Environmental Impacts					
Efficiency Improvements					

key low modest moderate moderately high high



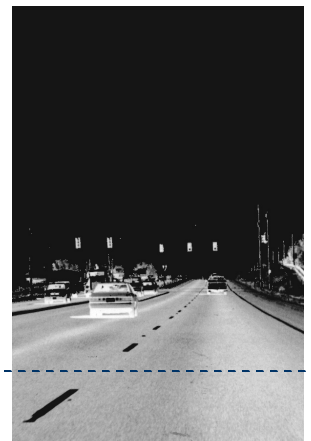
10.0 ALTERNATIVES

10.1 Description of Alternatives

In total, five alternatives were considered for selection on the four-lane portion of US 20, all of which were based upon the premise that the corridor was evolving towards a fully access-controlled facility. While this assumption was a guideline in the development of the alternatives, the corridor goals and objectives, and the purpose and need statement, were followed in alternative development and screening.

The initial alternatives developed and brought to the second round of public open houses included a do-nothing alternative, an interim alternative, and a build out alternative. The interim alternative (2010) considered traffic patterns and volumes as forecast in the year 2010 and addressed the configuration of the intersections according to these volumes. The build out alternative considered making the entire four-lane section of the corridor a limited access facility, given programmed projects and forecast traffic and turn movement volumes.

This chapter will be arranged by segment, as the alternatives were developed in this fashion. The alternatives developed for the US 20 corridor focus primarily on the treatment of each of the 26 at-grade intersections found along the corridor. To facilitate development of a plan, the management team developed a series of six alternative scenario treatments that could be used in any given intersection. The following figure illustrates the interstate configurations considered in the development of this plan.



Alternatives Diagrams

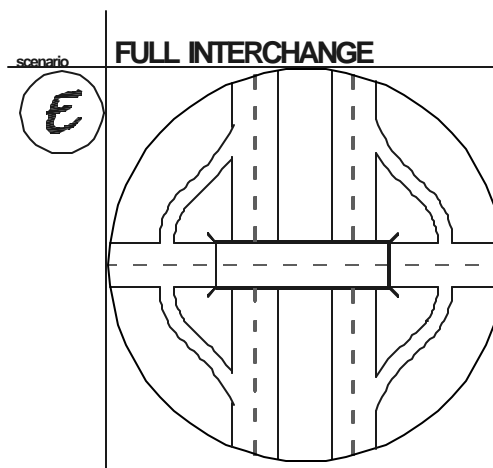
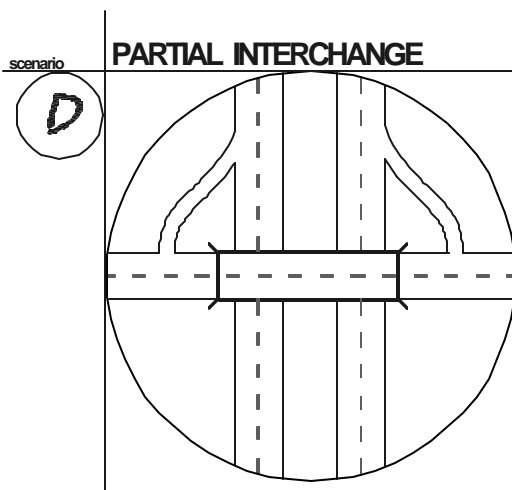
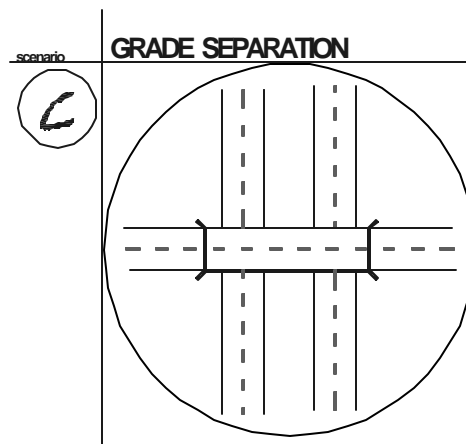
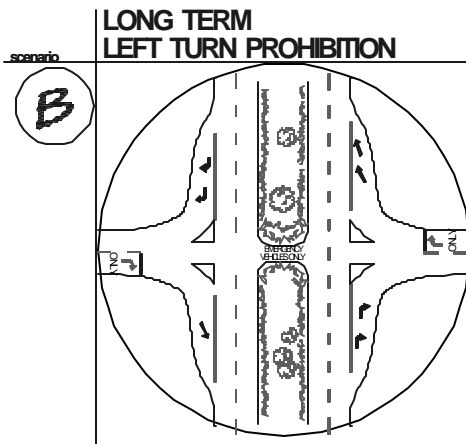
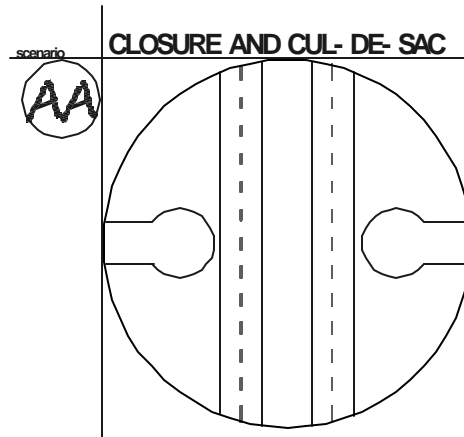
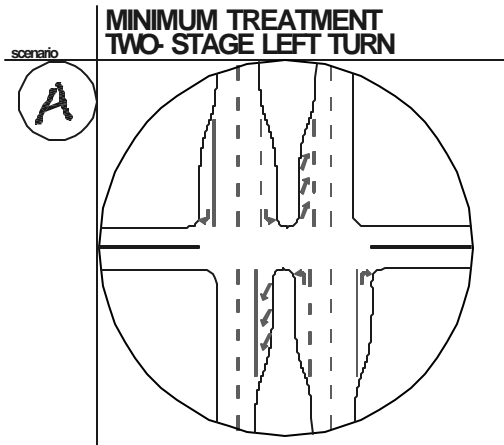


Diagram AA shows a closure and cul-de-sac. This treatment was proposed at low-volume intersections, or where reasonable accommodation could be made for turning and cross traffic.

Diagram A illustrates what we have referred to as a “minimum treatment.” This term describes what should happen to intersections that are to remain open in an at-grade configuration. This configuration provides acceleration and deceleration lanes and allows a two-stage left turn that would give more room for merging to left-turning traffic onto the highway.

Diagram B shows a center median closure, leaving only a right turn in and out option for the intersection, eliminating the through and left-turn movements.

The treatment in diagram C includes the construction of an overpass, which separates the grade of the crossing and allows through movements across the highway, but does not allow any access to the highway itself.

Diagram D shows the configuration of a partial interchange. The ramps on a partial interchange can be in any direction, but do not allow full and unfettered access to the highway. This treatment also separates the grade for cross traffic.

Diagram E shows a full interchange configuration that separates the grade of crossing traffic and allows access to and from the highway in all directions.

10.1.1 Segment 1

The urban portion of this highway is five-lane urban arterial, which is appropriate given present land use configuration of the area. There are approximately five signalized intersections on the urban segment, all of which operate at acceptable levels of service.

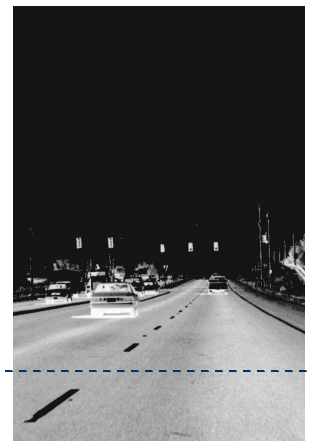
As is customary with roadways that have center turn lanes, direct driveway access is allowed onto the highway. At the time of this report all driveway accesses are operating in an appropriate manner, with no extraordinary accident history to indicate otherwise. The remainder of this report will not focus on the urban five-lane section, but will examine in greater detail the interconnection of this portion of the road with the four-lane segment beginning at John’s Hole.



US 20 Urban Arterial – Idaho Falls

The remainder of Segment 1 has four at-grade intersections at Telford Road, St Leon Road, Tower Road, and Hitt Road. This whole segment had been programmed for reconstruction, and that plan was put into alternative one and two. The programmed improvement included closing Telford Road, building an overpass at St. Leon Road, closing Tower Road, and putting a full interchange with County Road improvements at Hitt Road.

After our alternative development open houses, two additional alternatives were developed. Alternative three keeps Telford and St. Leon Roads as at-grade intersections, while closing Tower Road, and retaining the interchange



at Hitt Road. Alternative four closes Telford, places a full interchange at St. Leon Road, closes Tower Road, and keeps the full interchange at Hitt Road.

10.1.2 Segment 2

Segment 2 has four at-grade intersections at Coltman Road, County Line Road, Grant Road, and Holbrook Road. All four alternatives call for the closure of Coltman Road and the construction of a full interchange at County Line Road. The County Line Road improvement is programmed for construction in the year 2000.



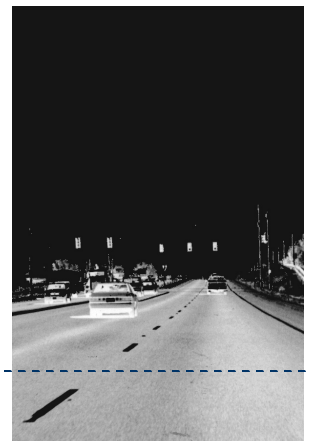
The intersection of County Line Road with US 20 occurs on a bend, making sight distance an issue.

Alternative 1 calls for the closure of Grant Road and a left and through prohibition on Holbrook Road. Alternative 2 closes Grant Road and puts a partial interchange at Holbrook. The partial interchange would include ramps to the south, and was suggested because of the proximity of the South Rigby interchange. Alternative 3 closes both Grant and Holbrook Roads and reconstructs the South Rigby interchange into a fully directional interchange. At present, this

interchange is a half interchange with ramps to the south. Alternative 4 also closes Grant and Holbrook Roads with the reconfiguration of the South Rigby interchange, but includes a frontage road facility on the west side of the highway between Grant Road and the new interchange.



Land uses at Holbrook Road will be served with a new interchange at South Rigby.



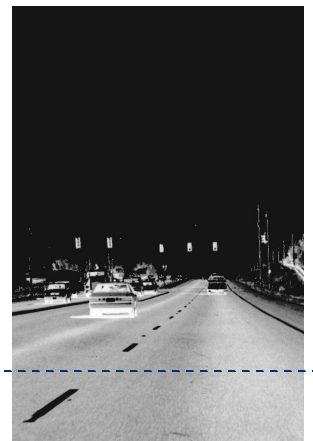
10.1.3 Segment 3

Segment 3 is the longest segment in our analysis and includes seven intersections. The segment begins with Ellis Road and continues with intersections at the frontage connection to Labelle, the Lorenzo Highway, and Lyman Road. The segment includes a frontage connection at Yellowstone Bear World and intersections with both Thornton Road and Burton Road.

All four alternatives call for the construction of an overpass at Ellis Road. Ellis Road is the first intersection outside an urban area, and preservation of local road connections is important. The next three intersections are in very close proximity to one another, with the South Fork of the Snake River separating Lyman Road from the Lorenzo Highway and the Labelle Connection to the south. Alternative 1 recommends that all three of these intersections remain open at-grade with the minimum treatment applied to them. Alternative 2 recommends consolidating the Labelle connection and the Lorenzo Highway by incorporating a full interchange that serves both roads. This alternative recommends closing the Lyman Road connection. Alternatives 3 and 4 recommend incorporating all three intersections into one interchange. This plan would include a new bridge over the South Fork of the Snake River to incorporate the Lyman Road connection into the interchange.



This area would be served by a single interchange with frontage roads connecting to it.



In all four alternatives the frontage connection serving Yellowstone Bear World is closed, with alternative access provided through the County Roadway network. The Thornton Road intersection is planned for an interchange to be constructed in Alternatives 1, 2, and 3. Alternative 4 shows this intersection as an overpass. Alternatives 1, 2, and 3 designate Burton Road as an overpass, and Alternative 4 closes the intersection.

10.1.4 Segment 4

Segment 4 presently has two at-grade intersections at Sugar-Salem Road and at State Highway 33. This segment has projects programmed at each intersection and these projects have already gone through the environmental process for construction. The only alternative for these two intersections is to construct a partial interchange serving the Sugar-Salem connection and a full interchange at the State Highway 33 connection.

10.1.5 Segment 5

Segment 5 has four at-grade intersections. These intersections include the frontage connection serving the ITD Maintenance Shed, Wilford Road (200 North), 300 North, and the South St. Anthony Access (400 North).

Alternative 1 proposes a left and through prohibition at the ITD Maintenance Shed, closes Wilford Road, provides an overpass at 300 North, and recommends a full interchange at the South St. Anthony Access. Alternative 2 recommends closure of both the ITD Maintenance Shed access and Wilford Road. An overpass is recommended at 300 North, and a full interchange at the South St. Anthony Access. Alternative 3 closes the ITD Maintenance Shed access, provides an overpass at Wilford Road, closes 300 North,



Wilford Road is the only through road connecting the community of Wilford with populated areas west of US 20.

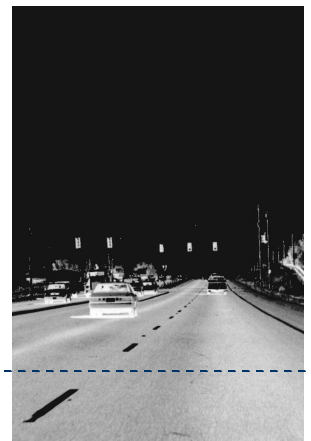
and recommends a full interchange at the South St. Anthony Access.

Alternative 4 closes the ITD Maintenance Shed access, provides for a full interchange at the Wilford Road area, closes 300 North, and puts an overpass at the South St. Anthony access, with a northbound off-ramp only.

10.1.6 Segment 6

Segment 6 has five intersections of concern. The at-grade intersections begin north of the St. Anthony interchange with the intersection of the St. Anthony Business Loop. The next intersection is Fun Farm Road, then Golf Course Road, followed by the Chester Townsite Road. The intersection furthest north on the four-lane section is the Chester Store access.

Alternative 1 recommends the minimum treatment for the St. Anthony Business Loop, and involves

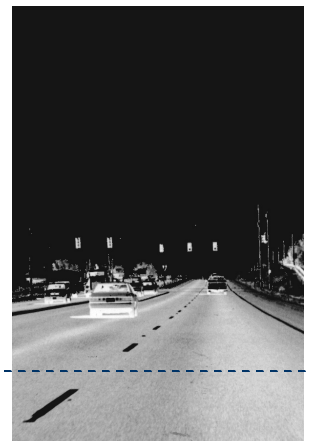


closing Fun Farm Road, with a new frontage connection west to the Business Loop on the north side of the road. Golf Course Road would stay open with the minimum treatment, and the Chester Townsite access would be closed, while the intersection at the Chester store would remain open with the minimum treatment. Alternative 2 recommends a full interchange at the St. Anthony Business Loop; closure of Fun Farm, Golf Course, and Chester Townsite access roads; a frontage facility between Fun Farm and the Business Loop; and construction of a full interchange where the Chester Store is presently located.

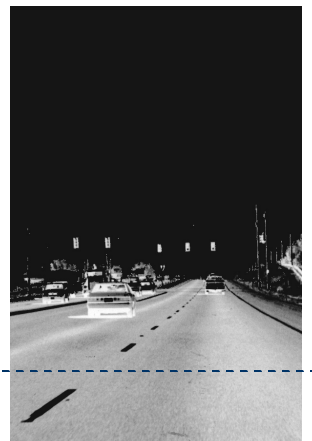
Based upon input received during the open houses, Alternatives 3 and 4 were developed. Alternative 3 recommends constructing a full interchange at the St. Anthony Business Loop; closing Fun Farm Road, with a new frontage facility between it and the Business Loop; placing an overpass at Golf Course Road; constructing a full interchange at the Chester Townsite Access; and closing the Chester Store access, but providing a connection to the interchange at the Chester Townsite. Alternative 4 departs from complete access control on this northerly segment of the four-lane facility, as the forecasted volumes are very low. This alternative recommends building a full interchange at the St. Anthony Business Loop, closing Fun Farm, and Golf Course Roads, and providing the minimum treatment at both the Chester Townsite Access and the Chester Store. The following table shows all the alternatives for every segment and intersection on the four-lane segment.



Intersection at Chester



Insert Intersection Alternative Matrix



10.1.7 Segment 7

Segment 7 of the corridor is the only two-lane segment being studied in this plan. There are several at-grade access points in this location, but given the low volumes of traffic on the highway and the very low volumes of traffic using these access points, the plan does not recommend closing them. Whereas the other corridor segments each had four alternatives including the do-nothing alternative, this segment has only two alternatives plus the do-nothing alternative.

Given the relatively low traffic volumes on this segment and the comparatively low accident record, the do-nothing alternative is viable. This alternative, however, would not address problems with queuing behind slow moving vehicles.

Alternative 1 would develop Highway 20 from Chester to Ashton Hill Bridge much like the present highway, with two travel lanes in each direction. Additional analysis would be needed prior to construction to determine appropriate access management techniques and the best alignment through the City of Ashton.

Alternative 2 looks much like the do-nothing alternative with one significant exception; passing lanes in each direction would be constructed to allow traffic queues to safely disperse. Approximately two miles of passing lanes in each direction would be necessary to accomplish the objective of this alternative.

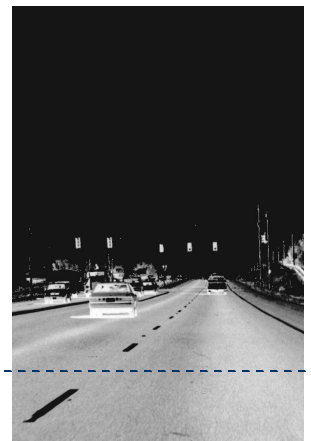
10.2 Recommended Alternatives

The alternatives for each section are packaged alternatives that shouldn't be dismantled. Since we received consistent comments about a couple of intersections, the impacts of making a few minor changes to segments 3, 5,

and 6 were analyzed. The analysis found that the proposed changes could be included in the recommended alternative without negative impacts to roadway operations or surrounding land uses, and in compliance with the project goals and objectives.

The following is the recommended alternative as modified based upon input received during the week of May 10, 1999, and subsequent correspondences. Included are project time frames for construction, and a reference showing the project priority.

AA = Closure and Cul-de-sac
 A = Minimum Treatment including Turning and Deceleration Lanes
 C = Grade Separation
 D = Partial Interchange
 E = Full Interchange



10.2.1 Segment 1

Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
1	Telford Road	AA	0-5 Yrs
2	St. Leon	E	0-5 Yrs
3	Tower Rd.	AA	0-5 Yrs
4	Hitt Rd.	E	0-5 Yrs

Key Issues for Segment 1

The majority of comments received for this segment focused on the intersections of St. Leon and Telford Road. The chief concern is an area industrial park that takes its primary access from Telford Road. The interchange is located at St. Leon, and presently there is not adequate local roadway infrastructure to serve the needs of the industrial park. Thus, as a part of the St. Leon Interchange project, adequate access must be created to serve the industrial area. The plan would include ensuring needed access that serves trucks and other large vehicles.

10.2.2 Segment 2

Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
5	Coltman Rd.	AA	0-5 Yrs
6	County Line Rd.	E	0-5 Yrs
7	Grant Rd.	AA	0-5 Yrs
8	Holbrook Rd.	AA*	0-5 Yrs

**This closure includes modifying the South Rigby Interchange from a half to a full interchange.*

Key Issues for Segment 2

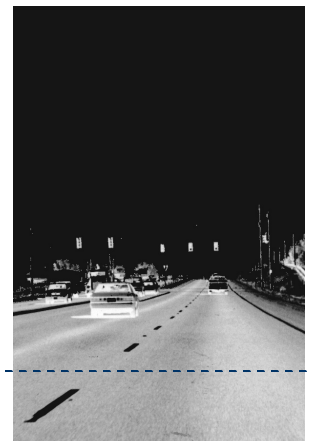
Plans for Segment 2 of US 20 have been in place for a while, so there are only a couple of outstanding issues in this segment. First, the closure of Grant Road does not include a frontage facility from Holbrook Road. One alternative included a frontage facility, but it did not receive popular support. There are alternative accesses through the County road network for people currently using the Grant Road Intersection. As previously stated, Holbrook Road will be closed to Highway 20, and a full interchange will be constructed where currently a partial interchange exists at the South Rigby exit.

10.2.3 Segment 3

Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
9	Ellis Rd.	C	5-10 Yrs
10	Frontage Conn. to Labelle	E*	5-10 Yrs
11	Lorenzo Highway	E*	5-10 Yrs
12	Archer/Lyman Rd.	E*	5-10 Yrs
13	Frontage Conn. (Bear World)	AA	0-5 Yrs
14	Thornton Rd.	E	0-5 Yrs
15	Burton Rd.	AA**	0-5 Yrs

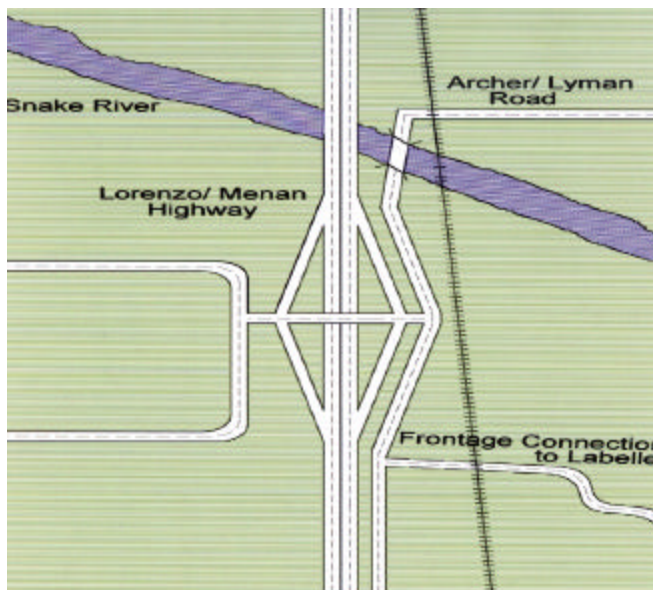
**Because of close proximity, all three intersections will be served by one interchange and a bridge over the Snake River.*

*** This is changed from an overpass to a closure based upon a planned County Road connection.*



Key Issues for Segment 3

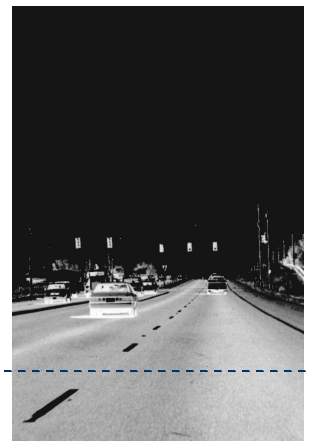
Segment 3 is the longest segment the analysis. It covers seven existing intersections, and includes all of Rigby and the southern part of Rexburg in its boundary. Several issues that have surfaced for this segment warrant additional discussion. First, only one interchange will be constructed to serve the intersections of the Labelle frontage connection, the Lorenzo Highway, and the Archer/Lyman Road. The schematic below offers an interpretation of what this might look like. There will be frontage road facilities connecting all three intersections to the interchange access.



In the proposed development of an interchange to serve the Lorenzo area, the existing sportsman's access on the west side of the highway will be closed. This is an at-grade access point, and cannot be allowed once this area becomes fully access controlled. This is an important access for fishermen and is well utilized. Preservation of this access is desired. There may be room to develop a narrow frontage road connecting to the county road at Bear World. Development of the Interchange at Lorenzo will require preservation of this access in its design.

Between the Archer/Lyman Road and the Thornton intersection on the east side of the highway are presently two agricultural access points. These appear to be legal accesses and function well to allow farm equipment access to cropland. These access points have very low volume and cause little concern for safety on the corridor in its present condition. The field has no other access points from county road facilities. An agreement should be entered into with the property owner that restricts these accesses to agricultural activities only until they can be closed and alternative access developed. As the corridor becomes a fully access-controlled facility, these accesses should be closed permanently to avoid safety risks associated with unexpected cross traffic.

Finally in this segment, we are proposing to close the access to the county road that serves Bear World. ITD has serious concerns about having a tourist attraction served by an at-grade intersection and the resulting potential for significant safety problems. By constructing an interchange in the Thornton area and closing the Bear World access, safety will be greatly enhanced. The question then becomes, how do people access Bear World from the Thornton interchange?





road up to standard to handle the additional traffic generated by the new attraction would be significantly less expensive than developing a completely new road. Another benefit of upgrading the County road would be aesthetic. The drive to Bear World meanders through the country and puts people in the mindset of getting away and seeing natural wonders. The problem with upgrading the road has already been stated; this route will impact several rural residences with additional traffic during the summer season.



An interchange constructed in the Thornton area will provide access to the Bear World tourist attraction.

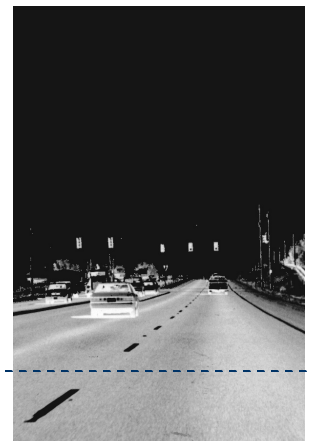
Presently there is a County road that serves this connection. However the road has many rural residences along it, and the road itself is not in a condition to handle the projected increase in traffic that a tourist attraction would generate. Two possible alternatives that could solve this situation are presented below. While two alternatives are addressed here, there are many other concepts that would address the needs in this area.

First, there could be an investment in the existing county road facility. Bringing this

Another alternative that would get people to Bear World—and whatever other attractions might locate in this area—is to build a new frontage road. This facility would provide more direct access to the attraction, reduce driver confusion, and improve emergency vehicle response time. There are some difficulties in creating a new frontage road facility. First, the overall construction cost of a new facility is high. The cost for new construction is significantly higher than improving existing facilities. Second, flooding concerns along the potential alignment of a frontage facility would increase the cost of construction. Finally, the

existence of a newly constructed frontage facility in close proximity to a major tourist attraction, in a corridor that has a lot of tourist oriented traffic, will be prone to additional development pressures. Depending on the scope and density of additional development, it could impact the operation of the proposed Thornton area interchange.

Alternatives could improve this situation, but they involve a significant capacity expansion between interchanges at Thornton and the Lorenzo area. Expansion might be



done as part of an overall area master plan.

The Area Master Plan would address, in its entirety, the issues associated with both the Lorenzo and Thornton area interchanges. This Master Plan would fully explore the relationship between tourism oriented land use and the demand placed upon the transportation system. The plan would also determine the amount of development potential in the area and the market for tourist destinations. By assessing the peak season demand placed on the transportation network serving the area at build out, the plan will help to determine what capacity will be necessary and how to phase the project improvements to adequately meet area demand. The Area Master Plan will also assess budget impacts and project development timing.

Each of these alternatives has significant costs associated with it. Limitations are placed on ITD funding. These limitations may make it impossible for ITD to bear all or even a fraction of the costs associated with County road improvements. While alternative local access to this area has been discussed, the State of Idaho is not obliged to participate financially in a solution that might improve roads off the State highway system.

10.2.4 Segment 4

Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
16	Sugar-Salem Hwy	D	0-5 Yrs
17	State Hwy 33	E	0-5 Yrs

Key Issues for Segment 4

In contrast to Segment 3, Segment 4 contains only two at-grade intersections, and the plans to improve them to interchange facilities predate this planning effort. The

recommended alternative has been the topic of several public hearings that have developed the environmental documentation for construction of a half interchange at Sugar City and a full interchange at State Highway 33. These projects were finalized in May of 1999.

10.2.5 Segment 5

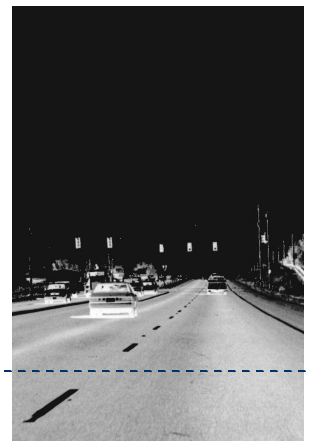
Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
18	ITD Maintenance Shed	AA	10-20 Yrs
19	Wilford Rd. / 200 North	E	10-20 Yrs
20	300 North	AA	10-20 Yrs
21	S St. Anthony / 400 North	E*	10-20 Yrs

* Based upon input from the CPAC and the public, this was changed from an overpass to a full interchange to better serve business in St. Anthony's south end.

Key Issues for Segment 5

Two main issues have emerged with regard to the plan in Segment 5. First was access at Wilford Rd./200 North. Originally, we had an interchange at the S. St. Anthony access with no additional access proposed at 200 North. Based on public input received at open houses along the corridor, it was determined that a full interchange was needed at 200 North. This recommendation became part of ITD's recommended alternative.

The development of a new interchange at Wilford Road necessitated the removal



of another interchange elsewhere on the corridor. To accommodate this change, an interchange that was originally proposed for the South St. Anthony area was downgraded to an overpass with access north into St. Anthony. When the recommended alternative was presented to the public and to the US 20 Corridor Planning Advisory Committee, it became evident that this business and industrial area also required full access to the highway. The recommended alternative, therefore, has a full interchange proposed for the South St. Anthony access.

10.2.6 Segment 6

Intersection Number	Intersection Name	Recommended Alternative	Project Time-frame
22	St. Anthony Business Loop	A*	5-10 Yrs
23	Fun Farm Road	AA	5-10 Yrs
24	Golf Course Rd.	AA	5-10 Yrs
25	Chester Access	A	5-10 Yrs
26	Chester Store	A	5-10 Yrs

**This was changed from a full interchange to an at-grade intersection improvement based upon funds available for improvements, lower traffic volumes, adequate site distance, and the need to preserve the connection to South St. Anthony and surrounding businesses.*

Key Issues for Segment 6

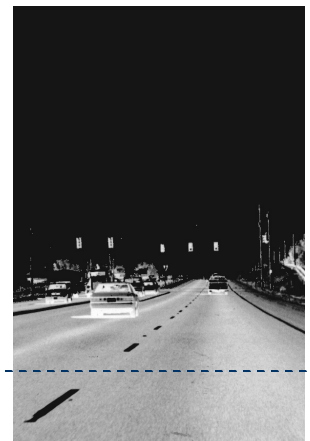
Several issues have come up during the open houses that we should address for this segment. First, the plan originally proposed a full interchange for the north St. Anthony Business Loop access. This plan has been changed due to the critical need for access in the south part of the community, and because

of low traffic volumes in this area. This intersection will be served by what is termed the “minimum treatment,” which includes left and right turn lanes and vehicle storage bays for left-turning drivers.

The plan recommends the closure of both the Fun Farm intersection and the Golf Course intersection. The State recognizes that there are concerns with both these closures; however, an overriding need to improve the safety of the corridor dictates that both these accesses be closed. The Fun Farm Road intersection sits at the base of a rise that obstructs the view of all intersection movements with the exception of the northbound right turn. This sight obstruction creates a hazardous situation that cannot easily be remedied.

Closing the Fun Farm Road intersection leaves residents on the west side of the highway without an appropriate level of access to US 20. To correct this situation, the plan proposes to construct a frontage road facility between Fun Farm Road and the north St. Anthony Business Loop access. This road will allow people living on the west side of the highway reasonably direct access to the road.

One final issue concerning the closure of Fun Farm Road involves a live stock trail crossing the highway twice a year at this location. At these times, the highway is closed as several hundred head of sheep cross it, headed for seasonal feeding ranges. Sheep ranchers in the area claim to have been given a permanent stock trail easement, but a search of the State’s records has revealed no such agreement. Due to the hazardous nature of this intersection, and the fact that crossing can occur in a much safer



location with minimal out-of-direction travel for the sheep, the State is still recommending permanent closure of this intersection.

Closure of the Golf Course Road intersection is also planned. Several issues led to the decision to close this facility. First, the intersection itself is at odd angles to the highway, requiring a partial turn to proceed through it. This turn is unexpected and can create a hazard, especially at night. Second, at the northeast and southwest quadrants of the intersection sit massive canal heads that cannot be moved or modified without a significant investment of public funds and the full cooperation of the irrigation district. The location of these canal structures makes it impractical to modify the intersection to acceptable standards, given the cost of the improvement compared to the access needs it serves.

The State is aware that Golf Course Road serves a golf course owned and operated by Fremont County. Proper signage can ensure that business at the golf course does not decline due to the closure of this intersection. Adequate County road access presently exists for golf course customers. The State will work with Fremont County to ensure that proper signage is placed along the US 20 corridor for the golf course.

10.2.7 Segment 7

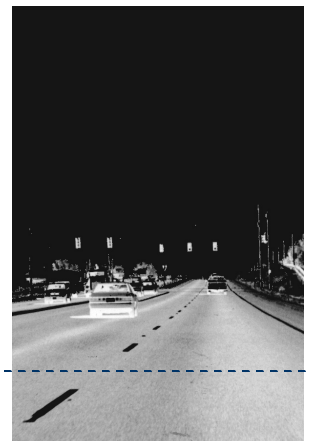
Segment 7 has two lanes of travel between Chester and Ashton, Idaho. Three alternatives were considered for this segment, with the recommended alternative being to construct two miles of passing lanes in each direction, as close to evenly spaced as practical. The development of these passing lanes should more than adequately handle anticipated traffic volumes for the 20-year planning horizon of this plan. It is expected that these improvements will be made in the 10-20 year timeframe.

The plan also recommends constructing curb, gutter, and sidewalk along US 20 within the city limits of Ashton. As part of this recommendation, appropriate locations for driveway access and spacing standards should be developed.

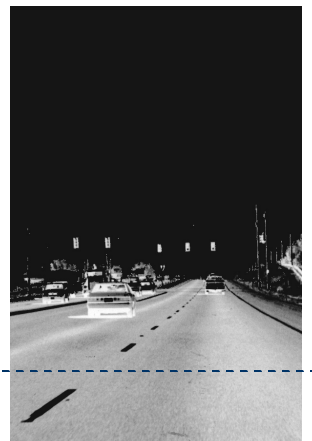
Key Issues for Segment 7

Two issues were discussed as they relate to this segment. First, a left turn refuge is needed on the two-lane section of the highway, especially during the winter months when icy road conditions are present. Having the storage available minimizes the risk of rear-end collisions. Second, development of sidewalks within the city limits of Ashton produced some concerns. It wasn't that residents were against having the sidewalks. Rather, they were concerned about costs that they would have to bear, and the amount of their property that sidewalks, curb, and gutter would require. One possible solution to these concerns is to develop sidewalks only on the east side of the highway. This plan would serve many businesses and impact fewer residences.

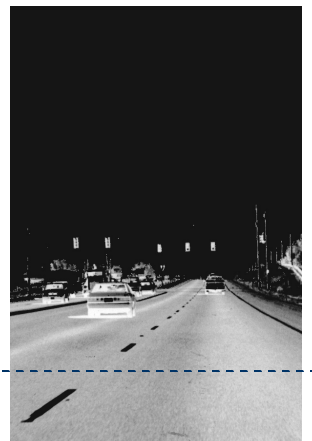
The following maps detail graphically the recommended alternative for US 20.



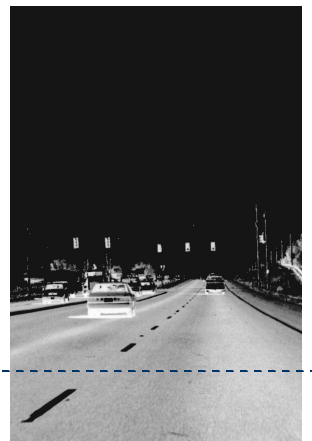
Segment 1 Recommended Alternative Map



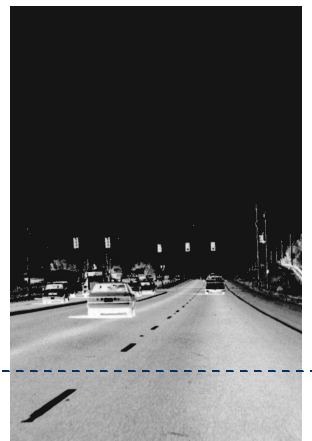
Segment 2 Recommended Alternative Map



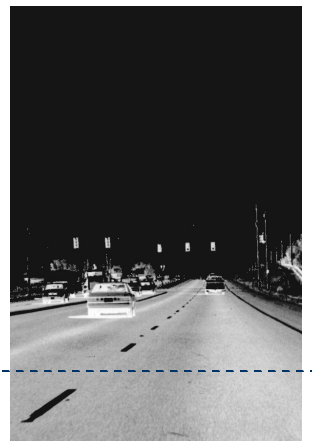
Segment 3 Recommended Alternative Map



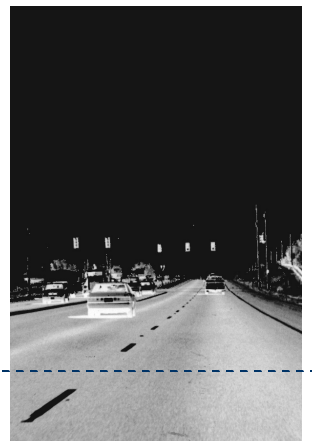
Segment 4 Recommended Alternative Map



Segment 5 Recommended Alternative Map



Segment 6 Recommended Alternative Map



Segment 7 Recommended Alternative Map



10.3 Corridor-wide Recommendations

Several areas of the US 20 corridor defy segmentation but still need overall consideration for the recommended alternative. Concerns tend to be corridor-wide, and while the problems might be addressed segment by segment, the solutions are needed throughout the corridor. These recommendations concern bicycle access to the corridor, lighting on the corridor, and signage on the corridor.

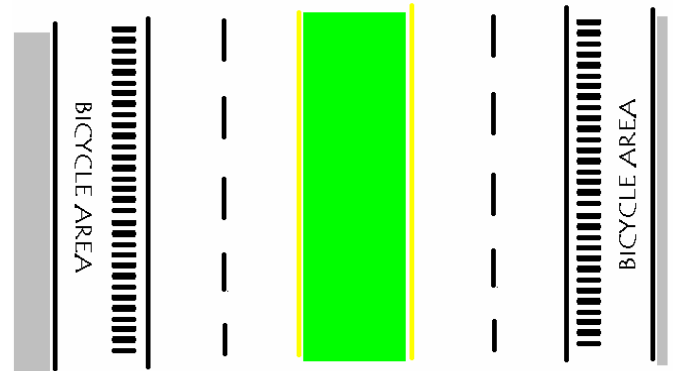
10.3.1 Bicycle Access

As noted in the existing conditions report, US 20 is designated as “most suitable” by the Idaho Bicycling Guide. This designation is appropriate because the area is connected with a vast network of bicycle and hiking trails. However, the rumble strips that have been cut into the concrete to warn motorists that they are driving off the travel way make riding on the shoulder difficult, and in many instances force cyclists into the travel lane.



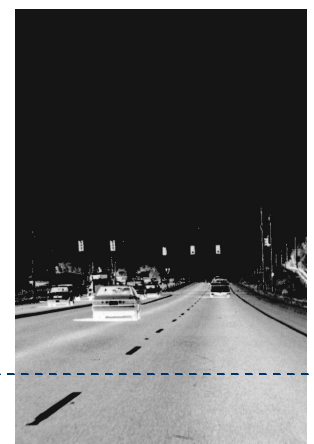
Present rumble strip configuration forces cyclists into the travel lane while riding on US 20 north of Rigby.

The figure below shows how a driver warning system might be put in place that would allow adequate cycling space on the shoulder, and provide better driver warning than the present rumble strip configuration.



PROPOSED RUMBLE STRIP CONFIGURATION (2005)

This configuration gives a better driver warning because it is a continuous warning. At present approximately 30 feet of smooth pavement separates each of the six strips that run the entire width of the shoulder. The new configuration warns the driver precisely when the tire leaves the travel lane to better protect bicyclists and pedestrians wanting to use the corridor. They have a free and unobstructed lane for their use, and the driver warning decreases the potential for driver error.



10.3.2 Lighting

With the exception of the urban areas, no outdoor illumination exists on the corridor. At night and especially during inclement weather, visibility around the at-grade intersections is very low. Some of the intersections cross the corridor at less than a 90 degree angle, which makes seeing the headlights or tail lights of a crossing or turning vehicle very difficult.

Nighttime illumination of the at-grade intersections would do two things. First, it would inform motorists that they are in a populated area, and they need to be alert for traffic. Secondly, it would improve the visibility of crossing traffic to motorists on US 20. Improved lighting could help to prevent accidents in the future and should be explored as an interim measure at intersections that will not be converted or closed by the year 2010. Lighting improvements should be incorporated into the design of individual interchanges as they near construction.

10.3.3 Signage

The US 20 corridor has the look and feel of an interstate highway facility. However, much of the signage on the US 20 corridor reflects rural highway standards. These are typically post-mounted signs of a size that a driver would expect on a rural route. This corridor, because of its configuration, needs updated and improved signage. Signage on the four-lane segment should meet interstate standards to give drivers more information. Better signage will decrease driver frustration and minimize rapid deceleration of vehicles as drivers quickly slow to avoid missing their intended destination.

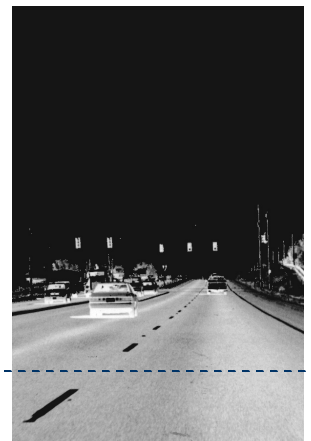
One other aspect of signage that needs to be addressed on the US 20 corridor is the amount of information that is given to the traveling public. A signage plan for the corridor should be put in place to determine not only the types of uses that exist in close proximity to the

corridor but also to determine the type and amount of information to convey through improved signage.



At present, highway signs along US 20 are small and hard to see from the left lane.

Finally, the Chester area, where the road converges from a four-lane facility down to two lanes, needs larger signs. A sign bridge may also be appropriate in this area for overhead signs alerting motorists to the traffic change. This area was the site of a fatal traffic accident in 1996 because a motorist got confused and had a head-on collision. The driver did not know that he was in the opposing traffic lane after the road merged down to a two-lane highway. Lighting of these signs is also advisable to ensure visibility.



11.0 IMPLEMENTATION RECOMMENDATIONS

11.1 Interchange Areas

US 20 will be undergoing vast changes within the next 10 to 20 years. Seven interchanges presently included in the State's six-year program are located on the US 20 corridor. The recommended alternative proposes 10 new interchanges for construction. The US 20 corridor has substantial right-of-way already, with approximately 120 to 200 feet throughout the corridor study area.

The interchange development process can require significant right-of-way. However there are also ways to develop interchange facilities within very confined right-of-way limits. Depending on the funding available, environmental sensitivities in the area, need for structures, and topographical features, interchange development can require different levels of right-of-way. Right-of-way needs will be determined individually for each interchange project through the environmental process.

11.2 Passing Lanes

The recommended alternative recommends the development of four miles of passing lanes in Segment 7 between Chester and the city of Ashton. These lanes can probably be constructed within the current right-of-way.

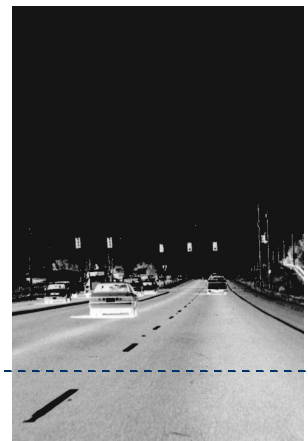
At the time the passing lanes are constructed, ITD District right-of-way agents should work with adjacent landowners to limit access to the passing lane section. Limiting access can be done in many ways, but typically a value is negotiated, and the access rights are purchased by the State as part of the cost of construction. This strategy will protect the area against driveway encroachment, which can negatively impact the operation of the improvement.

11.3 Land Use

Goal III of this corridor plan is to **“Maintain a viable interrelationship between land use and the transportation system.”** The relationship between transportation and land use is one of mutual dependence. Without land use improvements or destinations, the transportation system loses purpose, and without transportation facilities the land uses lose viability. The relationship is tenuous, however, because if the transportation system fails to adequately serve the land, the land is underutilized; conversely, if the land use encroaches onto the transportation system, the operation of the transportation network is impacted negatively. Finding a balance between access and mobility is the purpose of advanced planning.

As the interchanges are developed along US 20, there will be increased development pressure immediately around the improvement. Interchanges provide easy on-and-off access and are very attractive for new land uses. However, if businesses are allowed to locate near the ramp terminals, the resulting turning traffic degrades the performance of the interchange. Each interchange represents a substantial public investment, and its operation needs to be protected.

ITD should utilize a couple of mechanisms to protect the operation of new infrastructure along US 20 as the highway continues to develop. First, the purchase of access rights can be effective in ensuring that interchanges function properly in close proximity to the ramp terminals. As these interchanges are developed, 500 feet of access protection should be purchased on both sides of the highway. This buffer will keep conflicting turning



movements away from the interchange and minimize the impacts of queuing traffic behind turning vehicles.

Second, ITD should enter into a cooperative agreement with the agency that has responsibility for land use in the vicinity of the interchange. This agreement should establish consultation procedures for the State and the local agency when applications for land use changes are made that could impact the operation of the interchange. Typically, impact is measured by trips generated by the land use proposed. A threshold of 300 trips is commonly used to determine when the State should be consulted about impacts to their facilities.

Such an agreement should grant the State the authority to require that a traffic impact statement be filed by the developer should the State deem it necessary to assess impacts of the development. The agreement should also determine the required operational level for the State facilities and require the developer to mitigate the impacts of his development once the interchange falls below the specified operational standard.

11.3.1 Idaho STIP Information

Idaho STIP information is included in the appendix.

11.4 Local Initiatives

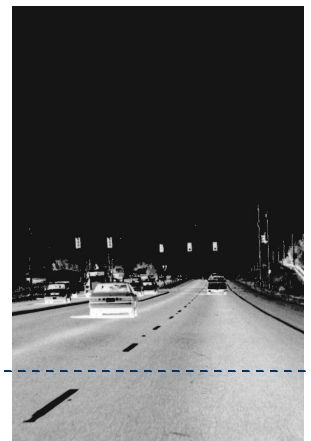
During the development of the *US 20 Corridor Plan* a few initiatives emerged in response to proposed intersection treatments. For example, a group of citizens around the Wilford Road area were concerned about losing direct access to US 20, as Wilford Road has many residences located on or near to it, and it is one of the only through roads linking the community of Wilford with the populated areas on the west side of the corridor. These people held several local meetings to voice

their concerns. They also mounted a letter-writing campaign that presented some compelling arguments as to why that intersection should have full access to the corridor.

Another letter-writing campaign developed in response to a proposal to close access to the South St. Anthony access. An industrial park is located in this part of the community, and the business and civic leaders wrote to express their concern about the proposed closure. An assumption of the original proposal was that the industrial park could be adequately served by a northbound off ramp into the park at the south entrance. The central St. Anthony access would serve for outbound movements. Letters written in response to this proposal indicated the heavy amount of truck traffic that accessed the park on a daily basis. Concerns were expressed that if the access were closed, the truck fleets located in the park would have to travel through the community to access the park. Such movement would be far too disruptive to the traffic patterns within the community. As a result, an interchange is being proposed for the South St. Anthony access, but it was moved from the Business Loop entrance north of the existing St. Anthony interchange.

Finally, a recent concern has been expressed about plans for the area between Thornton and Lorenzo. This concern has been linked to a belief that the City of Rexburg has annexation plans in this area and intends to annex to south of the Thornton interchange. This entire area needs additional study when the interchanges at Lorenzo and Thornton enter the environmental review process.

Additional study is required due to the on-going development of the area as a tourist-oriented commercial destination.



11.5 IDAHO FALLS REFINEMENT PLAN

To: BMPO Board Members

From: Darrell West

Re: Highway 20 refinement planning for Idaho Falls

Date: May 3, 1999.

On Thursday April 29, 1999, I received a telephone call from Don Galligan, project manager for the US 20 Corridor Plan from western Idaho Falls to Ashton, Idaho. In March of this year we provided this consultant with some information out of the BMPO traffic model to do an analysis of improving traffic on US 20 between the Lewisville interchange and the I-15 Interchange at John's Hole.

To date their analysis is complete; however, they are still developing the refinement plan that will accompany their analysis and findings for this area within the City. They have requested permission to present their alternatives and findings during their last round of public involvement for the Highway 20 Corridor Plan, which will take place on May 10th in the Idaho Falls area.

They realize that neither the BMPO Policy Board nor the Technical Advisory Committee have had the opportunity to review the planning document, and thus are requesting permission at this time to present their findings and take public comment that could then be incorporated into the final planning document.

The consultant looked at five alternatives for improving the traffic flow situation along this stretch of US 20. They are:

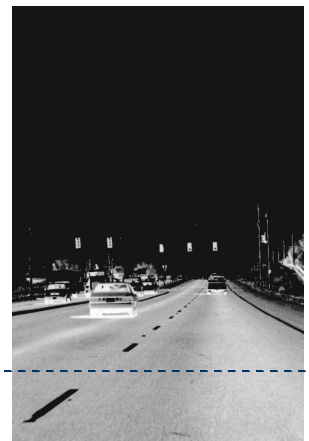
- 1) Do Nothing—This alternative would construct only committed projects within the STIP and maintain the corridor in its present state.
- 2) Closing Interchanges—one way to ease traffic congestion in this area is by eliminating access at several locations within this study area.
- 3) Widen the Corridor—This would add an additional lane of capacity between John's Hole and the Lewisville interchange.
- 4) Signalization—This alternative would signalize several interchanges making them essentially at-grade intersections.
- 5) Bypass—This alternative would look at the benefits and costs associated with constructing a US 20 bypass, and changing the existing roadway into a local street.

The following is a brief synopsis of the findings of the analysis.

Do-Nothing Alternative

This alternative would allow committed projects to proceed unencumbered, and would also allow routine maintenance activities to occur. Any improvements in this portion of the corridor would likely be TSM type alternatives such as adding additional signals at ramp terminals and minor widenings to accommodate bicyclists and pedestrians.

There are a couple of projects that might improve the operation in this part of the corridor, including the development of an interchange at Hitt Road, and possibly an interchange at St. Leon. Our model forecasts show slight improvements at the Science Center interchange and at the Lewisville interchange,



but traffic is virtually unchanged on the other three interchanges.

Given the traffic projections for this area and the complex weaving movements, doing nothing will result in unacceptable levels of service for several hours a day by 2015.

Closing Existing Interchanges Alternative

This alternative would close both the Lindsay Boulevard interchange and the Riverside Interchange. Doing this would yield acceptable levels of service in the forecast year.

While this alternative provides for traffic needs, it ignores the land uses that have developed that depend upon access to the highway at both the Lindsay Interchange and the Riverside Interchange. While negative impacts of these closures could be mitigated at the Riverside interchange, this is not the case for the Lindsay Interchange, closure of which would require significant out-of-direction travel.

Given the negative impacts to local businesses that this alternative would create, the consultant does not recommend pursuing this alternative.

Corridor Widening Alternative

This alternative would construct a third lane on the highway between John's Hole and the Lewisville interchange. This alternative would provide short-term relief of the traffic congestion situation by adding capacity to all movements through this part of the corridor.

This alternative has significant costs associated with its development. All bridge structures would need to be widened, there is significant cost to improving the bridges over the Snake River due to environmental

regulations for total containment of building materials, and the alternative begins to fail operationally in the out year of the analysis.

The consultant doesn't recommend pursuing this alternative.

Corridor Signalization Alternative

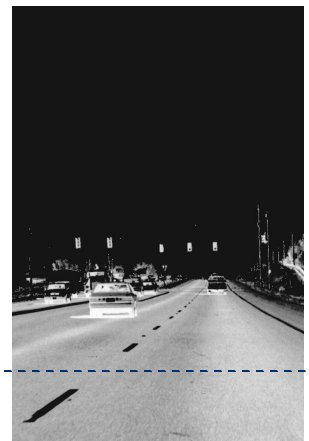
This alternative would place traffic control at the interchanges for Lindsay Boulevard and Riverside Avenue, essentially making these interchanges at-grade intersections. Again there is short-term gain from doing this, but in the long run, this alternative would only serve to increase congestion on the corridor, and it is inconsistent with ITD's direction for managing this facility.

Corridor Bypass Alternative

The Bypass Alternative would construct a new highway facility that would turn west just after the Lewisville interchange and follow an alignment along W 33rd N, across the Snake River and I-15 then connecting with N 26th W, and finally reconnecting with West Broadway. This bypass may or may not have an interchange onto I-15, though model data suggest it would alleviate some congestion around the John's Hole interchange.

What would then essentially be "Old Highway 20" would be connected with East Iona Road, forming a type of northern commercial loop around the city. This alternative provides the ultimate solution to the congestion within this study area. It keeps levels of service at acceptable levels and provides another urban arterial link within the City traffic network.

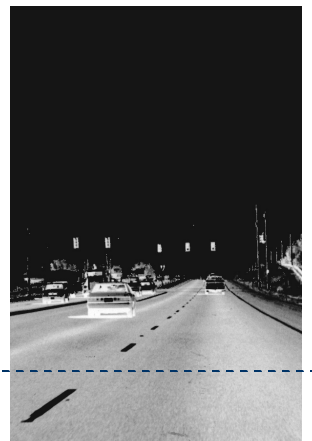
This alternative, while feasible, is very expensive. It would need



to be accomplished with a majority of State and Federal dollars. The approximate cost of the improvement is \$40 million, with approximately two miles of new construction and three miles of improvements and widening. This estimate does not include an interchange onto I-15, which would add approximately another \$5 million.

The consultant has asked permission to display these alternatives along with the recommended alternative for the remainder of the Highway 20 corridor at their May 10th Idaho Falls Public meeting. This would be for informational and discussion purposes only, and a recommended alternative for the project study area between John's Hole and the Lewisville highway would not be presented. The consultant only wants public feedback at this time.

This is the last time the consultant is scheduled to do a public meeting on the corridor for the Highway 20 project. Additional work on this project for the Idaho Falls urban area could require additional expenditure from BMPO.



11.6 RIGBY REFINEMENT PLAN

Introduction

The US 20 Corridor Plan has developed alternatives for continued facility and safety improvements. The South Rigby interchange falls within Segment 2 on the US 20 corridor, which includes the city of Rigby. The area around Holbrook Road needs access for developed land uses, but the intersection of Holbrook Road has a serious and fatal accident history. Given the danger that exists at this intersection, as well as the intensity of existing land use around this area, the Idaho Transportation Department (ITD) has determined that additional study of this issue and area are warranted.

Purpose

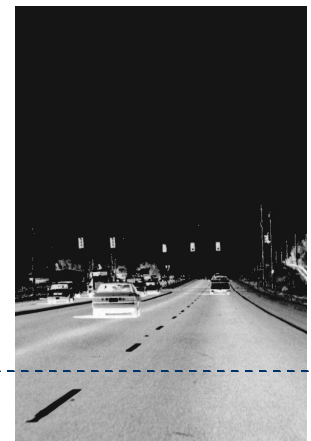
The South Rigby interchange is presently a half interchange with access to and from the south. The purpose of this analysis is to determine whether the existing half interchange can be replaced with a full interchange, thus allowing access to and from all directions to the areas surrounding Holbrook Road and the South Rigby area. In this way ITD is consistent with the corridor Purpose and Need Statement which states that “the purpose of the US 20 Corridor Plan is:

- To identify alternatives that provide for a safe and efficient transportation system for movement of people and goods within and through the corridor;
- To preserve and protect the environment, built and natural, and improve the interrelationship between land use and transportation, and;
- To provide a framework for future transportation project selection and development.”

Analysis Parameters

Several features of this analysis have set boundaries for determining whether an interchange could be developed on this site. First, the Eastern Idaho Railroad operates a branch line that parallels the corridor, and at this point actually runs between the Old Yellowstone Highway and the existing alignment of US 20. These tracks are leased to an Idaho short line operator and are active. The primary commodities shipped over these rails are agricultural products; thus, there is little chance that double stack trains would ever be in operation on this line. This analysis makes the assumption that clearance for double stack rail cars is required. Actual design might differ if it is determined that elevations can be lowered crossing the rail line.

Other features this study analyzed included whether any of the existing infrastructure could be recycled into the updated design of the interchange. On the east side of US 20 the Old Yellowstone Highway parallels the corridor. This feature was considered an eastern terminus for the interchange design. There are several businesses located around Holbrook Road that might be impacted by the ramp design for a new interchange. Where possible the conceptual design of the interchange tried not to take these business properties for right-of-way. It was assumed that the US 20 alignment would not be shifted east or west, but would remain in its present alignment. Finally, there are several water features in the area. To avoid excessive environmental mitigation, the interchange design does not cross any rivers or canals.



Methodology

The State of Idaho follows standards as developed by the American Association of State Highway and Transportation Officials (AASHTO) for design and development of its highways. Given the aforementioned parameters and using AASHTO standards, a conceptual design for a south Rigby fully directional diamond interchange was prepared.

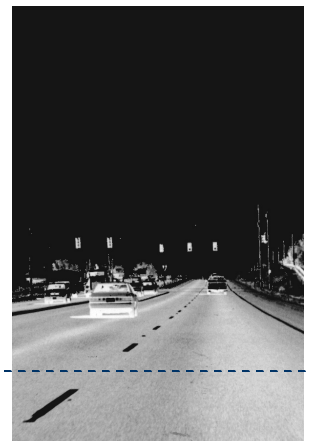
Interchange Features

The development of a full diamond interchange for the South Rigby area requires a completely new infrastructure. Unfortunately none of the existing half interchange can be recycled into the development of the new facility for several reasons. First, the existing overpass was designed to carry only northbound traffic; thus it is only one lane wide. The existing ramps will not work because of the angles at which they diverge and converge onto the highway. Finally, to design the ramps without direct impact to area wetlands, the US 20 over crossing needed to be moved south of the existing alignment.

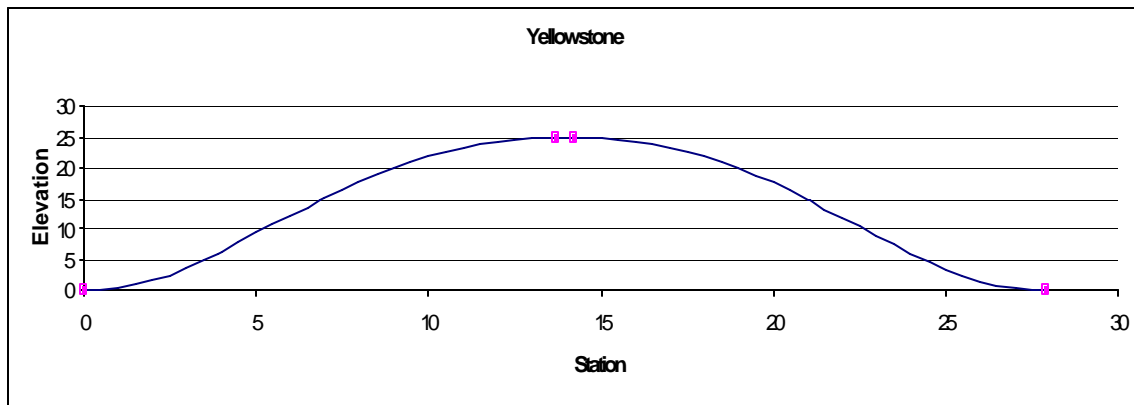
There is no way to construct this interchange, given our parameters, without crossing the Eastern Idaho Railroad (EIRR) tracks east of US 20. In this location the Old Yellowstone Highway also parallels the corridor and acts as an access or frontage road for the proposed interchange. Railroads traditionally do not want additional at-grade crossings, and particularly one that has high use rates. Even if crossing the EIRR tracks at-grade could be resolved, it would be physically impossible to come down the slope required for the highway overpass prior to the railroad tracks.

Since the tracks have to be crossed, adequate clearance is needed from the bottom of the bridge deck to the top of the rails to allow

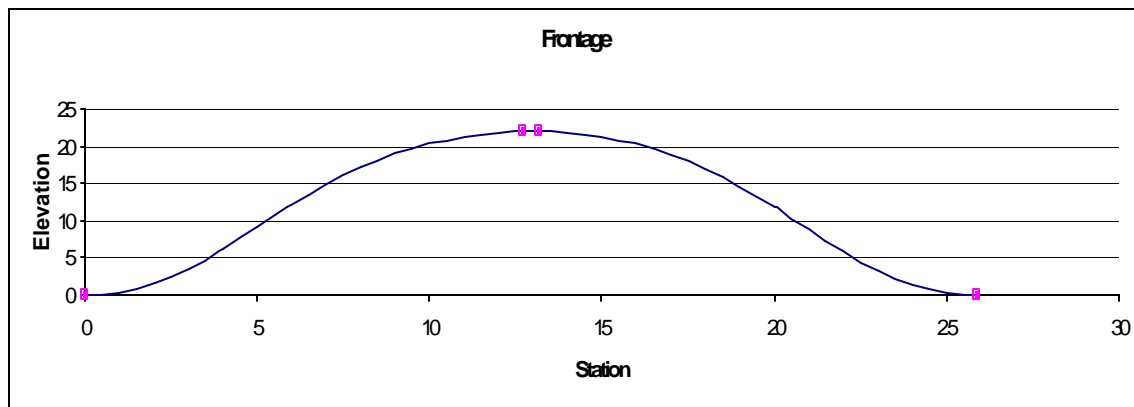
double stack operation on the branch line. Our design has ensured that there is 23 feet of vertical clearance over the EIRR tracks. Providing this needed clearance has required that the vertical grade be elevated for the Old Yellowstone Highway and a proposed frontage road facility be built on the west side of the interchange. This design will also allow 16 feet of vertical clearance over US 20 for the movement of goods and military convoys. Following is a vertical grade profile for the Old Yellowstone Highway and the proposed frontage facility. Also shown is a cross-section view of the improvement, its elevations, and bridge locations.



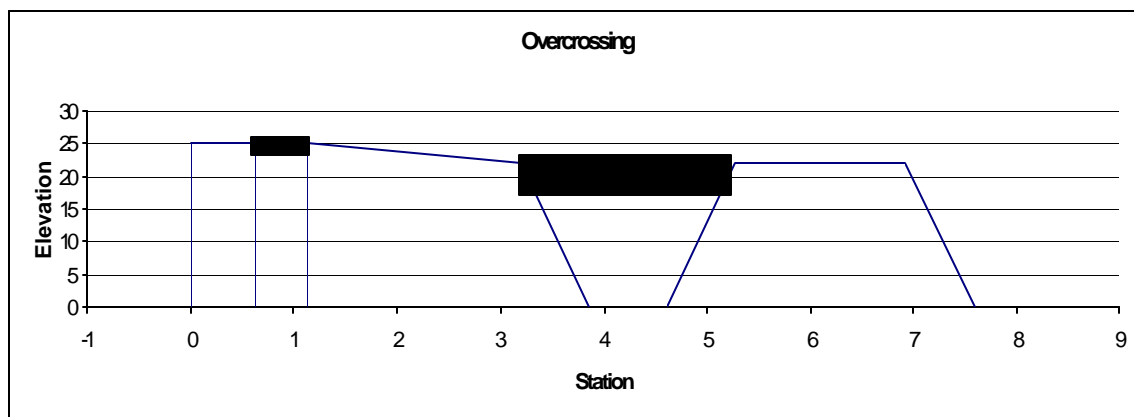
Vertical Profile of the Old Yellowstone Highway



Vertical Profile of the Proposed Frontage Road



Cross Sectional View of Interchange Area



To elevate the Old Yellowstone Highway the required 23 feet, retaining walls will need to be constructed for the fill material. Retaining walls will prevent encroachment onto the railroad right-of-way and will minimize the impacts of roadway construction on several properties east of the Old Yellowstone Highway. Because the grade of the highway is being elevated, several properties on the east will lose their access to the road. To compensate for this an access road is proposed along the bottom of the retaining wall to allow properties cut off from the elevation of the Old Yellowstone Highway to gain access to the north where the elevation drops.

The conceptual design of the proposed interchange complies with AASHTO design guidelines. The design proposes to have the ramp terminals controlled by stop signs on the highway over crossing. Both the Old Yellowstone Highway and the proposed frontage road on the west have a design speed of 55 MPH. The ramps of the new interchange facility have been designed as 26 feet in width, which will allow traffic to pass a stalled vehicle.

Due to wetland mitigation concerns, the facility has been designed to avoid the river to the north and several irrigation canals in the immediate vicinity. The ramps on the north side of the over crossing begin immediately at the south end of the existing bridge structure on US 20. Locating the ramps all on the south side of the river saves additional costs associated with improving the bridges on US 20 and the Old Yellowstone Highway.

The following graphic is a conceptual line drawing of how the facility might overlay the area. Right-of-way would need to be purchased on the west side of US 20 to construct the needed ramps and to connect a frontage facility. To save on cost for the development of the interchange the frontage

facility could be eliminated from this design. The resulting design would require people to double back to access the west side of the highway and would force local traffic from South Rigby into town to gain access to US 20, but alternative routes are available should project costs need to be cut.

